SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : SCT57B
Model: CK569BGT1X/BWT
CK569BGT1X/VWT

SERVICE Manual

COLOR TELEVISION RECEIVER

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ELECTRONICS

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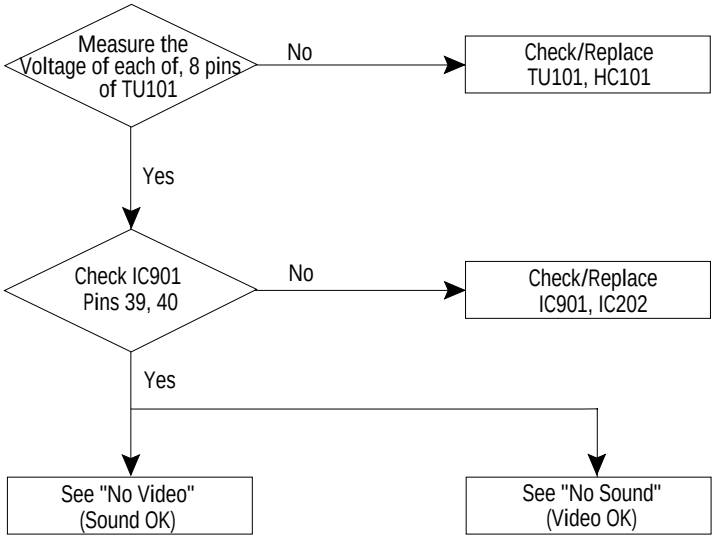
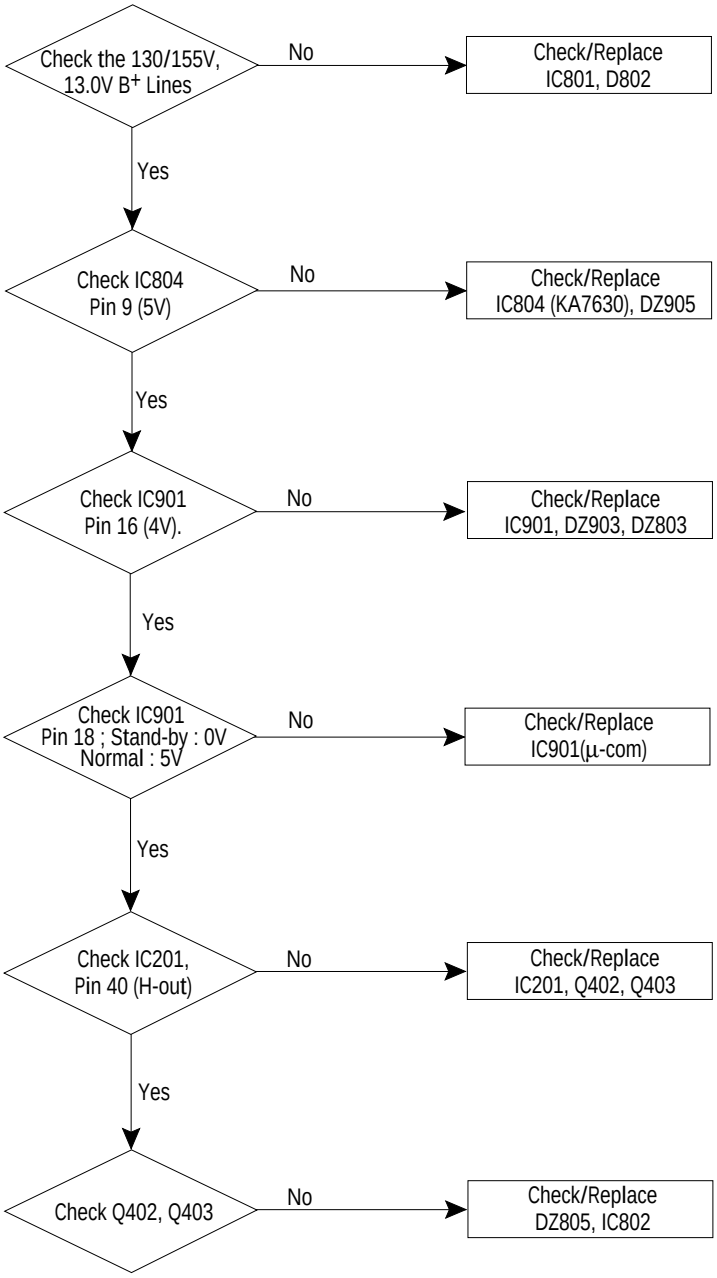
5. Troubleshooting

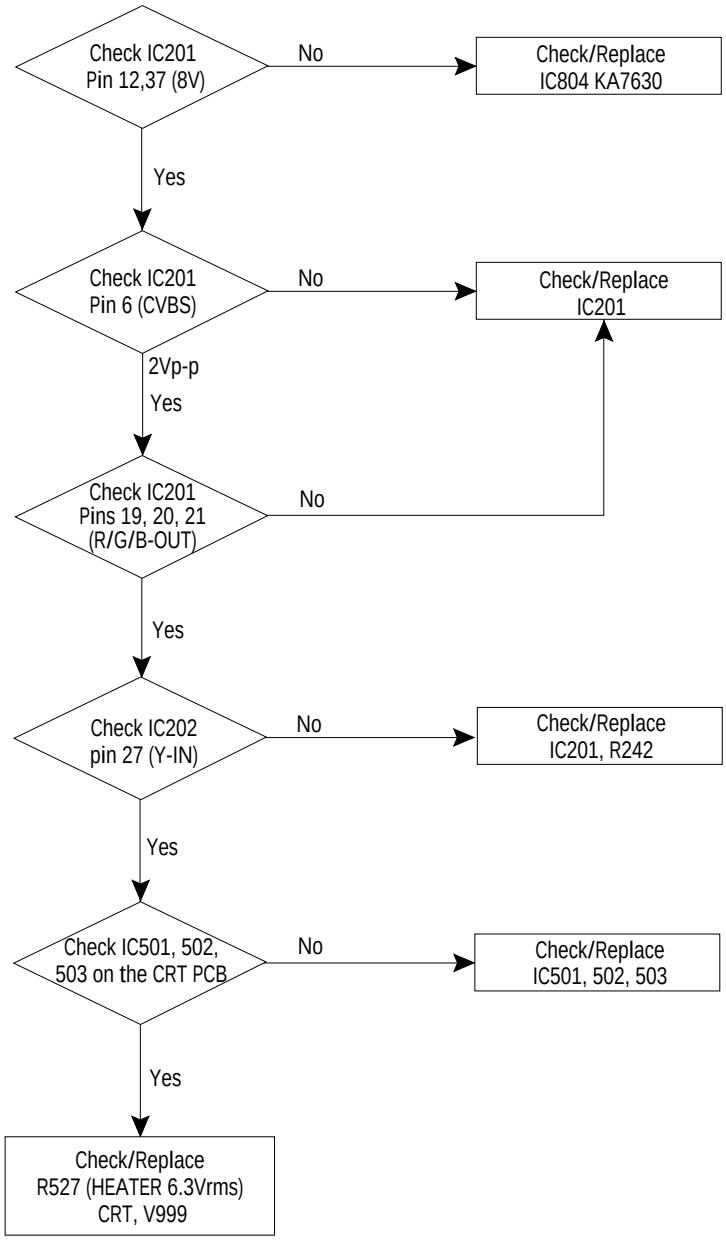
5-1 No Video (Raster On, No Sound)



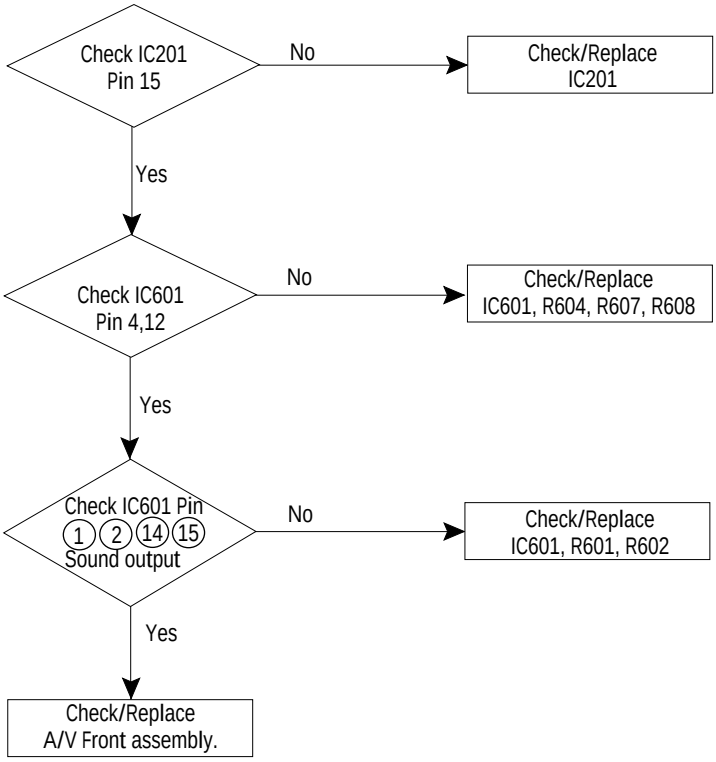
5-2 No Power


Check the 130/155V, 13.0V B+ Lines
No
Check/Replace IC801, D802
Yes
Check IC804 Pin 9 (5V)
No
Check/Replace IC804 (KA7630), DZ905
Yes
Check IC901 Pin 16 (4V).
No
Check/Replace IC901, DZ903, DZ803
Yes
Check IC901 Pin 18 ; Stand-by : 0V Normal : 5V
No
Check/Replace IC901(μ-com)
Yes
Check IC201, Pin 40 (H-out)
No
Check/Replace IC201, Q402, Q403
Yes
Check Q402, Q403
No
Check/Replace DZ805, IC802

5-3 No Video (Sound OK)

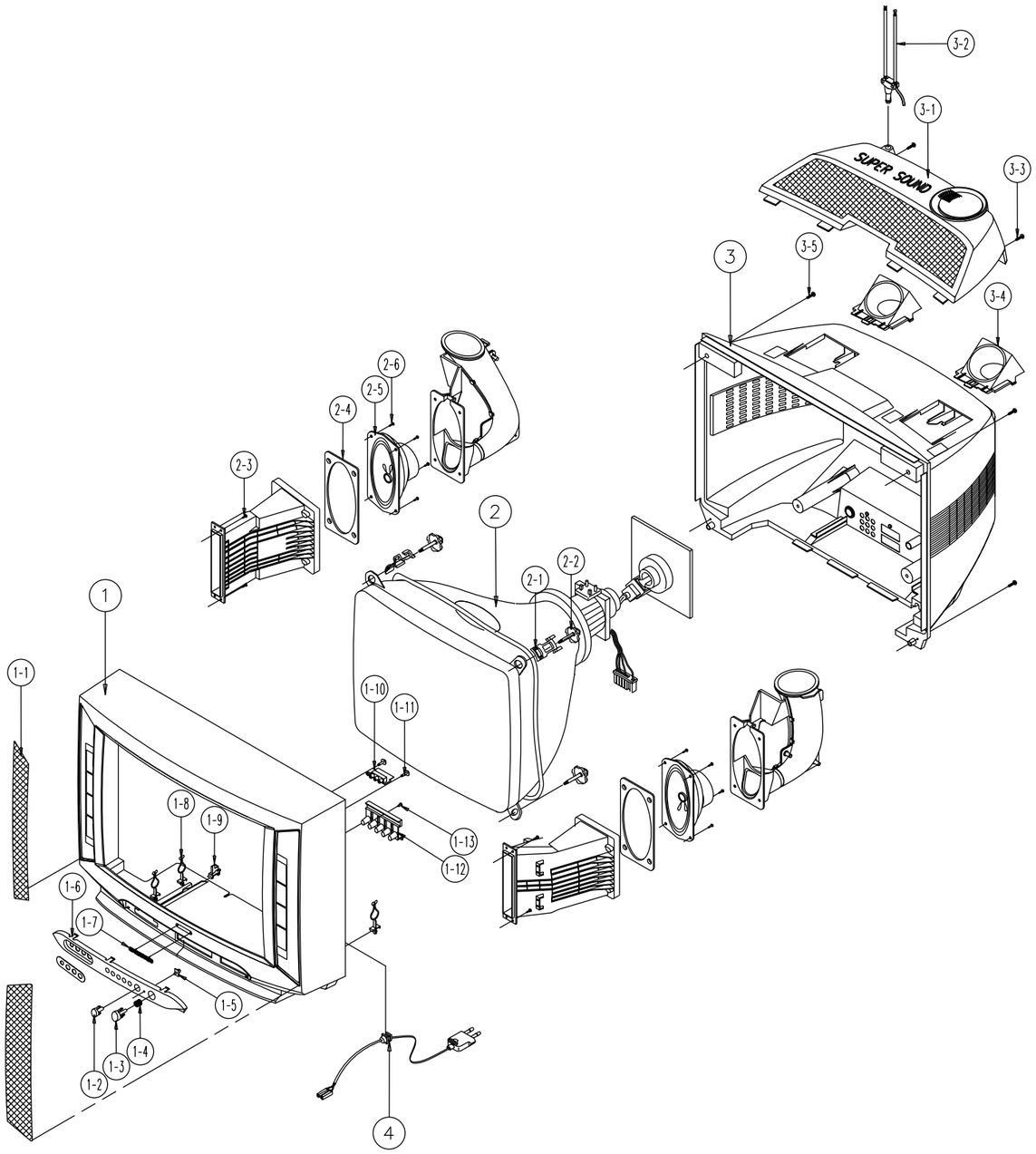


5-4 No Sound (Video OK)



6. Exploded View & Parts List

6-1 CK569BGT1X/BWT(VWT)



No	Code No	Description	Specification	Q'ty	Remark
1	AA91-10336J	ASSY-CABINET,FRONT	-,CK569BGTR,BK708P BWT,HB,BLK	1	
	AA64-31129E	CABINET-FRONT	-,569B,BK708P BWT,HIPS,HB,BLK,	1	
1-1	AA63-50336A	GRILLE-WOOFER,L	-,569B,-,SECC,T0.5,BLK,-	1	
	AA63-50337A	GRILLE-WOOFER,R	-,569B,-,SECC,T0.5,BLK,-	1	
1-2	AA64-40431A	WINDOW-REMOCON	-,503E,-,ABS,HB,LG41338,-	1	
1-3	AA64-10716A	KNOB-POWER	-,566B,-,ABS,HB,MET BROWN	1	
1-4	AA61-60003T	SPRING-CS	-,SUS304,0.5,OD7,H13.5,N5,-,-,	1	
1-5	AA64-40432A	INDICATOR-LED	-,503E,-,PMMA,HB,CLR,-	1	
1-6	AA64-40466L	DECORATION-FRONT	-,CK569BGTR,KSP213 ML,HIPS,V0,	1	
1-7	AA64-70010B	BADGE-BRAND	AL,SS R2000 25,SILVER,L50,-,-,	1	
1-8	AA65-30105A	CLAMP-WIRE	NYLON 66,V2,NTR,15MM,ALL MODEL	2	
1-9	AA61-40053A	STOPPER-PCB	ALL MODEL,HIPS HB,WHT,HB,-,-	1	
1-10	AA95-40004M	ASSY-PCB,A/V	-,CS5377/MVTX,SCT12A,-,-,-	1	
1-11	AA60-10002A	SCREW-TAPPING	RH,+,M4,L12,ZPC(YEL),-,OD14	2	
1-12	AA64-10717A	KNOB-CONTROL	-,-,-,ABS,HB,MET BROWN	1	
1-13	6002-000514	SCREW-TAPPING	RH,+,2,M4,L15,ZPC(BLK),SWR	1	
2	AA03-10026K	CRT-COLOR	-,A53QCA891X(B),+380mG,21,90d	1	
2-1	AA65-30019A	CLAMP-D,COIL	NYLON-66,V0,NTR,DADH-460 20,-	4	
2-2	3704-000110	SOCKET-CRT	14P,29.1,25.5,SN,ISHS09S/BK	4	
2-3		ASSY-HOLDER,SPK OPTION			
2-4		ASSY-HOLDER,SPK OPTION			
2-5	AA91-60207A	ASSY-HOLDER,SPK	-,M-PP,HB,BLK/HORN,168mm,8R15W	1	
2-6	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	8	
3	AA64-31131C	CABINET-BACK	-,569B,-,HIPS,V2,BLK,-,-	1	
3-1	AA63-30214A	COVER-TOP,SPK	-,569B,PK708P,HIPS,HB,BLK,-,-	1	
3-2	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
3-3	AA60-10050T	SCREW-TAPPING	RH,+,2S,M4,L20,ZPC(BLK),SWRCH1	2	
3-4		ASSY-HOLDER,SPK OPTION			
3-5	AA60-10050T	SCREW-TAPPING	RH,+,2S,M4,L20,ZPC(BLK),SWRCH1	4	
4	AA61-20284A	HOLDER	-,P-CORD,PP,VO,BLK,KE-002	1	

7. Electric Parts List

7-1 CK569BGT1X/BWT (VWT)

Loc. No.	Code No.	Description ; Specification	Remark
		ASSY-PCB,MAIN(OPT)	
		BUYER : CIS (RUSSIA)	
*	AA94-10132X	ASSY-PCB,MAIN(OPT);CK569BGT1X/BWT,SCT57B,RUSSIA,-	
	AA94-10134D	ASSY-PCB,MAIN(OPT);CK569BGT1X/VWT,SCT57B,N-RUSIA	
C101	2401-000758	C-AL;220nF,20%,50V,GP,TP,5x11mm,5mm	
C102	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11.5,5mm	
C103	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C104	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C105	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C106	2401-001082	C-AL;330nF,20%,50V,GP,TP,5x11mm,5mm	
C107	2401-000914	C-AL;22uF,20%,16V,-,TP,5x11,5mm	
C108	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C109	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V,TP,-,7.5	
C209	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C210	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C211	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C213	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5m	
C214	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
C215	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C216	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C217	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C218	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C219	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C220	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C221	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C222	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C223	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C224	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C225	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C226	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
C227	2201-000986	C-CERAMIC,DISC;12pF,5%,50V,NPO,TP,5x3mm,2.5mm	
C228	2201-000257	C-CERAMIC,DISC;16pF,5%,50V,CH,TP,5x3,5	
C229	2301-000285	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm	
C230	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C231	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-	
C232	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C233	2309-000138	C-FILM,PE-PPF;100nF,5%,50V,TP,20x16x8.5,7.5m	
C234	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C235	2202-000162	C-CERAMIC,MLC-AXIAL;15pF,5%,50V,SL,TP,3.5x19,-	
C236	2202-000253	C-CERAMIC,MLC-AXIAL;4.7nF,20%,16V,Y5R,TP,1.9x3.5,7	
C237	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C238	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
C239	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C240	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C241	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C242	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-	
C243	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C244	2202-000199	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V,TP,-,7.5	
C245	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C246	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C255	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C256	2202-000830	C-CERAMIC,MLC-AXIAL;82pF,10%,50V,Y5P,TP,3.5x19,-	
C301	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C302	2401-003028	C-AL;100uF,20%,25V,WT,TP,6.3x11,5mm	
C303	2401-001661	C-AL;68uF,20%,100V,GP,TP,10x16mm,5m	
C304	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C305	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C306	2301-000188	C-FILM,PEF;1nF,5%,100V,TP,10.5x12.5x6.5,5	
C402	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
C403	2401-000901	C-AL;22uF,20%,160V,GP,TP,10x20mm,5m	
C404	2201-000291	C-CERAMIC,DISC;1nF,10%,500V,Y5P,TP,8.5x5MM,5	
C405	2401-002268	C-AL;2.2uF,20%,250V,LZ,TP,8X11,5	
C406	2306-000187	C-FILM,MPPF;330nF,5%,400V,BK,26x20.5x13.5,	
C407	2201-000984	C-CERAMIC,DISC;680pF,10%,2KV,Y5P,TP,11x6,7.5m	
C408	2305-000382	C-FILM,MPEF;4.7nF,5%,400V,TP,-,5mm	
C409	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C410	2401-001661	C-AL;68uF,20%,100V,GP,TP,10x16mm,5m	
C411	2305-000178	C-FILM,MPEF;10nF,5%,100V,TP,-,5mm	
C412	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C413	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C415	2306-000326	C-FILM,MPPF;4.7nF,5%,1.6KV,TP,28.5x16x9mm,	
C416	2303-001004	C-FILM,PPF;15nF,5%,400V,TP,20x6.5x13,7.5m	
C418	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C419	2401-001397	C-AL;470uF,20%,25V,GP,TP,10x16mm,5m	
C420	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C421	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C422	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C423	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C424	2401-002278	C-AL;22uF,20%,250V,WT,TP,13x21,5	
C425	2305-000154	C-FILM,MPEF;100nF,5%,400V,TP,21.5x6.5x11.5	
C426	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C427	2201-000406	C-CERAMIC,DISC;270pF,10%,2KV,Y5P,TP,8x6,7.5	
C502	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C503	2201-000969	C-CERAMIC,DISC;10nF,+80-20%,3KV,Y5V,TP,-,10mm	
C504	2401-001232	C-AL;4.7uF,20%,250V,GP,TP,10x12.5mm	
C506	2401-000430	C-AL;10uF,20%,250V,GP,TP,10x16mm,5m	
C507	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C508	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C509	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C601	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
C602	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C603	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
C604	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C605	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
C606	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C607	2401-001998	C-AL;1000uF,20%,25V,GP,TP,10x20,5mm	
C705	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C707	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C709	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C710	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C712	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C713	2301-000247	C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C714	2301-000289	C-FILM,PEF;5.6nF,5%,50V,TP,7x6x3,5	
C717	2301-000289	C-FILM,PEF;5.6nF,5%,50V,TP,7x6x3,5	
C718	2301-000247	C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C719	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C721	2301-000175	C-FILM,PEF;15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C722	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C723	2301-000175	C-FILM,PEF;15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C725	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C727	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C728	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C801	2306-000112	C-FILM,MPPF;100nF,20%,250V,BK,-,15mm	
C804	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C805	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C806	2401-003030	C-AL;220uF,20%,450V,GP,BK,30x35mm,1	
C807	2303-000163	C-FILM,PPF;2.2nF,5%,800V,TP,15x13x8.5,7.5	
C808	2401-002284	C-AL;33uF,20%,50V,GP,TP,5x11mm,5mm	
C809	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5m	
C811	2201-000144	C-CERAMIC,DISC;100pF,5%,50V,CH,TP,8x3,5	
C812	2201-000954	C-CERAMIC,DISC;4.7nF,20%,400V,Y5U,BK,7x16,10m	
C813	2201-000954	C-CERAMIC,DISC;4.7nF,20%,400V,Y5U,BK,7x16,10m	
C814	2201-000991	C-CERAMIC,DISC;560pF,10%,2KV,Y5P,TP,13x7,7.5	
C815	2401-003058	C-AL;100uF,20%,200V,WT,TP,16x25mm,7	
C816	2401-000293	C-AL;100uF,+30-10%,200V,HR,TP,16x25	
C817	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C818	2401-000706	C-AL;2200uF,20%,25V,GP,TP,16x25mm,7	

Loc. No.	Code No.	Description ; Specification	Remark
C819	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C820	2401-003047	C-AL;2200uF,20%,25V,WT,TP,16x25,7.5	
C821	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C823	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C824	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C825	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C826	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C827	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C828	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11.5,5mm	
C829	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C830	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C831	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C832	2401-000287	C-AL;100uF,20%,16V,WT,TP,6x11mm,5mm	
C833	2401-000287	C-AL;100uF,20%,16V,WT,TP,6x11mm,5mm	
C901	2201-000234	C-CERAMIC,DISC;150pF,5%,50V,CH,TP,9.5x3,5	
C902	2301-000108	C-FILM,PEF;1.5nF,5%,50V,TP,6.5x3.0x5.5mm,	
C903	2201-000119	C-CERAMIC,DISC;100nF,+80-20%,50V,Y5V,TP,8x3.5	
C904	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C905	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C906	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C907	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C908	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C909	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C910	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C911	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C912	2401-001333	C-AL;470nF,20%,50V,GP,TP,5x11,5	
C913	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C914	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C915	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C916	2201-000193	C-CERAMIC,DISC;10pF,0.3pF,50V,CH,TP,5x3,5	
C917	2201-000573	C-CERAMIC,DISC;47pF,5%,50V,CH,TP,6.5x3.0,5	
C918	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C919	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C920	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C921	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C922	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C923	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C924	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C925	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C926	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C927	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
CN501	AA39-20570A	LEAD CONNECTOR-ASSY;-,YBNH025-08,TIE,8PxB5/B3,500m	
CN602	3711-002644	CONNECTOR-HEADER;BOX,5P,1R,2.5mm,STRAIGHT,SN	
CN701	3711-002647	CONNECTOR-HEADER;BOX,8P,1R,2.5mm,STRAIGHT,SN	
CN802	AA27-20003T	COIL-DEGAUSSING;-,22,16.7ohm,60T,2600mm,E	
CN904	3711-002644	CONNECTOR-HEADER;BOX,5P,1R,2.5mm,STRAIGHT,SN	
CW701	2503-000158	C-NETWORK;330pFx4,20%,50V,MCCB1H331MX4YT	
CW901	2503-000156	C-NETWORK;100pFx4,20%,50V	
D205	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D217	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D401	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D402	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
D403	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
D404	0402-001012	DIODE-RECTIFIER;FMP-3FU,1500V,5A,TO-3PF	
D405	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D406	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41	
D407	0402-000216	DIODE-RECTIFIER;ERC24-06,600V,1.0A,DO-204	
D408	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D501	0402-000216	DIODE-RECTIFIER;ERC24-06,600V,1.0A,DO-204	
D502	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D503	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D504	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D601	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D602	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D701	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D801	0402-001160	DIODE-BRIDGE;D5SB60,600V,2.8A,SIP-4,ST	
D802	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,1.0A,DO-41	
D803	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D804	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D805	0402-000231	DIODE-RECTIFIER;FMG-G26S,600V,4A,TO-220F,ST	
D806	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D807	0402-000233	DIODE-RECTIFIER;FML-G12S,200V,5A,-	
D809	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D810	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D901	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D902	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D903	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D904	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D905	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D906	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D907	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
DV801	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP	
DV802	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP	
DZ101	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ201	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ204	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ205	0403-000551	DIODE-ZENER;MTZ3.9B,3.9V,3.89-4.16V,500mW,	
DZ301	0403-000660	DIODE-ZENER;MTZ22A,22V,20.15-21.2V,500mW,D	
DZ302	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,TP	
DZ303	0403-000538	DIODE-ZENER;MTZ16C,15.69-16.51V,500mW,DO-3	
DZ304	0403-001039	DIODE-ZENER;MA2560,56V,52-60V,1W,DO-41,TP	
DZ401	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,TP	
DZ402	0403-000295	DIODE-ZENER;MTZ5.1B,5.1V,4.94-5.20V,500mW,	
DZ420	0403-000294	DIODE-ZENER;MTZ4.7B,4.55-4.80V,500mW,DO-34	
DZ501	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ502	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ503	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ504	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ601	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ602	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ603	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ604	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ605	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ701	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ702	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ703	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ704	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ705	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ803	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ805	1203-001217	IC-POSI.ADJUST REG.;431,TO-92,3P,4.58MIL,PLASTIC,2	
DZ807	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ901	1203-000451	IC-VOLTAGE REGULATOR;33,TO-92,3P,-,PLASTIC,31/35V,2	
DZ902	0403-000295	DIODE-ZENER;MTZ5.1B,5.1V,4.94-5.20V,500mW,	
DZ903	0403-000559	DIODE-ZENER;MTZ6.2C,6.2V,6.12-6.44V,500mW,	
DZ904	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ905	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
⚠ F801	3601-000281	FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5x20mm	
F801A	3602-000114	FUSE-HOLDER;-,-,30mohm	
F801B	3602-000114	FUSE-HOLDER;-,-,30mohm	
⚠ F802	3601-001086	FUSE-FERRULE;125V,5A,QUICK-ACTING,CERAMIC,2	
HC101	AA13-20004A	IC-HYBRID;-,PAP102T,SIP,6P,PRE-AMP,TP	
⚠ IC201	1204-001145	IC-DEMODULATOR;TDA8844,DIP,56P,-,PLASTIC,8.8V	
⚠ IC301	1204-000426	IC-VERTICAL PROCESSO;TDA8350Q/N4,SIP,13P,-,PLASTIC,	
⚠ IC401	1203-000243	IC-POSI.FIXED REG.;7812A,TO-220,3P,-,PLASTIC,11.5	
⚠ IC501	1201-001159	IC-VIDEO AMP;6107,ZIP,9P,300MIL,SINGLE,-,PL	
⚠ IC601	1201-001064	IC-POWER AMP;7297,ZIP,15P,-,DUAL,32dB,PLAST	
⚠ IC701	1204-000473	IC-AUDIO PROCESSOR;TDA9859,DIP,32P,-,PLASTIC,-,-,	
⚠ IC801	1203-001313	IC-PWM CONTROLLER;3S0680,TO-3P,5,150MIL,PLASTIC,	
⚠ IC802	0604-001038	PHOTO-COUPLER;TR,130-260%,200mW,DIP-4,ST	
⚠ IC803	1203-001006	IC-VOLTAGE REGULATOR;78R05,TO-220F,4P,-,PLASTIC,4.8	
⚠ IC804	1203-000644	IC-POSI.FIXED REG.;7630,SIP,10P,-,PLASTIC,5.1/8V,	
⚠ IC901	AA13-30019R	IC-MCU;-,Z8933212PSC-R3719,16BIT,SDIP	
⚠ IC902	1103-000156	IC-EEPROM;24C04,512X8BIT,DIP,8P,300MIL,1	
J415	2001-001037	R-CARBON(S);0.39ohm,5%,1/2W,AA,TP,2.4x6.4m	
JA701	3722-000183	JACK-SCART;21P,4mm,SN,BLK,NO	
L101	2701-001033	INDUCTOR-AXIAL;1uH,10%,5x14mm	
L102	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L103	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L204	2701-000197	INDUCTOR-AXIAL;5.6uH,10%,2.5x3.4mm	
L205	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L206	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L207	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L208	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L301	2701-000116	INDUCTOR-AXIAL;10uH,10%,4.2x9.8mm	
L302	2701-000116	INDUCTOR-AXIAL;10uH,10%,4.2x9.8mm	
L303	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L304	2701-000178	INDUCTOR-AXIAL;33uH,10%,2.8x7mm	
L401	AA27-40003L	COIL-HORIZ,WIDTH;-,1.0mH,DR14x20,2UEW0.45,ST	
L402	AA27-30003L	COIL-LINERITY;-,73uH,DR12x15,0.55mm,-,BK,15%	
L601	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L603	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L701	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L702	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L703	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	

Loc. No.	Code No.	Description ; Specification	Remark
L704	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L709	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L801	AA29-30001Q	FILTER-LINE;-,20mH,1.26A,-,BSF3050	
L803	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L804	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
L805	AA27-10002Y	COIL-CHOKE;-,100uH,K,10,700mA,T,100UH-K(S	
L806	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L807	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L808	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L901	2701-000189	INDUCTOR-AXIAL;470nH,10%,2.5x3.4mm	
L903	2701-000197	INDUCTOR-AXIAL;5.6uH,10%,2.5x3.4mm	
L904	2701-000211	INDUCTOR-AXIAL;68uH,10%,2.5x3.4mm	
L905	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L906	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LD901	AA96-30001B	ASSY-LED,GUIDE;-,AA61-50055A,DL-G5RGA,-	
Q204	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q207	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q210	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q401	0502-000242	TR-POWER;KSA614,PNP,25W,TO-220,TP,40-24	
Q402	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L,-,120-	
Q403	0502-000450	TR-POWER;2SD1887YD,NPN,1500V,800V,10A,7	
Q704	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,TP,120-	
Q901	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q902	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q903	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q904	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q905	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q906	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,TP,120-	
Q907	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q908	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
R101	2003-001035	R-METAL OXIDE(S);27ohm,0.05,2W,AF,TP,3.9x10mm	
R209	2001-000010	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R212	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R214	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R215	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R218	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R219	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R220	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R221	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R222	2001-000440	R-CARBON;1ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R223	2001-000617	R-CARBON;3.9Mohm,5%,1/8W,AA,TP,1.8x3.2m	
R224	2001-000832	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R225	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R226	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R227	2001-000739	R-CARBON;4.7Mohm,5%,1/8W,AA,TP,1.8x3.2m	
R230	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R233	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R234	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R235	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R239	2001-000009	R-CARBON;20Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R241	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R242	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R244	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R246	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R247	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R248	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R249	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R250	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R251	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R252	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R253	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R255	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R256	2004-001234	R-METAL;75Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R257	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R258	2004-001914	R-METAL;39Kohm,2%,1/8W,AA,TP,1.8x3.5mm	
R259	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R260	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R261	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R262	2004-001995	R-METAL;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R270	2001-000890	R-CARBON;6.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R301	2004-001970	R-METAL(S);1.8Kohm,1%,1/2W,AA,TP,6.5x2.5m	
R302	2004-004087	R-METAL(S);1.5ohm,1%,1/2W,AA,TP,2.5x6.5mm	
R303	2004-004087	R-METAL(S);1.5ohm,1%,1/2W,AA,TP,2.5x6.5mm	
R304	2001-001131	R-CARBON(S);33Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R305	2003-001018	R-METAL OXIDE(S);220ohm,5%,2W,AF,TP,3.9x10mm	
R306	2003-001018	R-METAL OXIDE(S);220ohm,5%,2W,AF,TP,3.9x10mm	
R307	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	

Loc. No.	Code No.	Description ; Specification	Remark
R401	2004-004092	R-METAL;52.6Kohm,1%,1/2W,AA,TP,2.5x6.5	
R402	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R403	2001-001155	R-CARBON(S);5.6Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R405	2001-001138	R-CARBON(S);390ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R406	2003-002008	R-METAL OXIDE(S);18Kohm,5%,2W,AF,TP,3.9x10mm	
R407	2003-000993	R-METAL OXIDE(S);3.9Kohm,5%,1W,AF,TP,2.5x6.5mm	
R408	2008-000179	R-FUSIBLE(S);10ohm,5%,1/2W,AA,TP,2.5x6.5mm	
R409	2008-000264	R-FUSIBLE(S);1ohm,5%,1W,AF,TP,3.9x10mm	
R410	2001-001114	R-CARBON(S);270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R411	2001-001066	R-CARBON(S);110ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R413	2008-000251	R-FUSIBLE(S);0.27ohm,10%,2W,AF,TP,3.9x10mm	
R414	2008-001033	R-FUSIBLE(S);10ohm,5%,2W,AF,TP,3.9x10mm	
R415	2008-000221	R-FUSIBLE;0.47ohm,10%,1/2W,AA,TP,4.7x11m	
R416	2001-000633	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R417	2004-001408	R-METAL(S);91Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
R418	2004-001408	R-METAL(S);91Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
R419	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	
R421	2001-000022	R-CARBON(S);33ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R501H	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R502H	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R503	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R504	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R505	2008-001015	R-FUSIBLE(S);1.5ohm,5%,2W,AF,TP,3.9x10mm	
R507	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R508	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R509	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R510	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R511	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R512	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R526	2008-001047	R-FUSIBLE(S);68ohm,5%,2W,AF,TP,3.9x10mm	
R527	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R601	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10mm	
R602	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10mm	
R603	2001-000232	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R604	2001-000947	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R605	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R606	2001-000232	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R607	2001-000947	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R701	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R702	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R703	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R704	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R709	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R710	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R711	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R712	2001-000539	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R713	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R714	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R715	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R717	2001-000539	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R718	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R719	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R726	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R727	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R728	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R729	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R730	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R731	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R733	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R734	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R735	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R736	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R740	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R741	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R803	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R804	2001-001150	R-CARBON(S);470Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R805	2001-001150	R-CARBON(S);470Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R806	2004-001967	R-METAL(S);68Kohm,1%,1/2W,AA,TP,6.5x2.5mm	
R807	2004-001373	R-METAL(S);100Kohm,1%,1/2W,AA,TP,2.4x6.4m	
R808	2002-001011	R-COMPOSITION;3.3Mohm,10%,1/2W,AA,TP,3.7x9mm	
R809	2002-001013	R-COMPOSITION;4.7Mohm,10%,1/2W,AA,TP,3.7x9mm	
R810	2003-001090	R-METAL OXIDE(S);10Kohm,5%,2W,AF,TP,4x12mm	
R811	2003-000784	R-METAL OXIDE(S);7.5Kohm,5%,2W,AF,TP,4x12mm	
R812	2006-000321	R-CEMENT;5.6ohm,5%,7W,CB,BK,9.5x13.5x39	
R813	2001-001050	R-CARBON(S);1.5Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R814	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	

Loc. No.	Code No.	Description ; Specification	Remark
R815	2004-001889	R-METAL(S);127Kohm,1%,1/2W,AA,TP,2.5x6.5m	
R816	2004-001983	R-METAL;2.49Kohm,1%,1/2W,AA,TP,2.4x6.4	
R817	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R818	2006-000321	R-CEMENT;5.6ohm,5%,7W,CB,BK,9.5x13.5x39	
R819	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	2008-000266	R-FUSIBLE(S);1ohm,5%,2W,AF,TP,3.9x10mm	
R821	2008-000266	R-FUSIBLE(S);1ohm,5%,2W,AF,TP,3.9x10mm	
R822	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	2003-000005	R-METAL OXIDE(S);1ohm,5%,2W,AA,TP,4x12mm	
R824	2001-001125	R-CARBON(S);300Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R901	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R902	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R903	2001-000066	R-CARBON(S);10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R904	2004-000218	R-METAL;10Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R905	2004-000218	R-METAL;10Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R906	2004-000253	R-METAL;11Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R908	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R909	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R910	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R911	2001-000214	R-CARBON;1.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R912	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R913	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R914	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R916	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R917	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R918	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R919	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R920	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R921	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R922	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R923	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R924	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R925	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R926	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R927	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R928	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R929	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R930	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R931	2001-001114	R-CARBON(S);270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R932	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R933	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R934	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R935	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R936	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R937	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R938	2001-000832	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R939	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R940	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R942	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R943	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R944	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R945	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R946	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R948	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R949	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R951	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R952	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R953	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R954	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R955	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R956	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM901	AA59-60001U	MODULE-REMOCON;-,ORC-50VF/SR-12V,38KHz,940nm,	
RP801	1404-000187	THERMISTOR-NTC;4.7ohm,15%,2800K,27.2mW/C,TP	
RP803	1404-000180	THERMISTOR-PTC;14ohm,20%,-,290V,25A,-,ST	
SF102	2904-001063	FILTER-SAW AV;38.9MHz,SIP5K,TP,17dB,PAL-B/G,	
SW801	3403-001020	SWITCH-PUSH;250V,5A,DPST,OFF-ON-OFF	
SW901	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW902	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW903	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW904	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW905	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
⚠ T201	AA26-10006E	TRANS-IF;-,7MG,VIF,-,7mm,5pF,79.1MHz,ST	
⚠ T401	AA26-50001B	HORIZ.DRIVE;-,7.1mH,102uH,10-20uH,YL081,ST	
⚠ T444	AA26-30004Y	TRANS-FLYBACK;-,FSV-21B005(S),21,125V	
⚠ T801	AA26-20007F	TRANS-SWITCHING;-,90VAC~260VAC,130/15/15,CE,EE	
⚠ TU101	AA40-10003K	TUNER-V/S;TELE1-002,PAL-B/G,-,105CH BWT	
⚠ TU101	AA40-10003T	TUNER-V/S;TELE4-016,PAL-B/G,BK,181CH VWT	

Loc. No.	Code No.	Description ; Specification	Remark
⚠ V999	3704-000110	SOCKET-CRT;14P,29.1,25.5,SN,ISHS09S/BK	
X202	2801-000274	CRYSTAL-UNIT;4.433619MHz,30ppm,28-AAM,20pF,	
X203	2801-000226	CRYSTAL-UNIT;3.579545MHz,20ppm,28-AAM,15pF,	
X901	2801-003224	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAY,12.5pF,	
Z208	2903-001040	FILTER-CERAMIC;TR,5.5/6.0/6.5MHz,-,1dB,-,TP,T	
Z210	2903-001019	FILTER-CERAMIC;TR,5.5/5.742MHz,-,-,-,TP,-	

ASSY-PCB,A/V

*	AA95-40004M	ASSY-PCB,A/V;-,CS5377/MVTX,SCT12A,-,-,-	
CA02	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA03	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA04	2202-000720	C-CERAMIC,MLC-AXIAL;8.2nF,20%,16V,Y5R,TP,3.5x19,-	
CA05	2202-000720	C-CERAMIC,MLC-AXIAL;8.2nF,20%,16V,Y5R,TP,3.5x19,-	
CA06	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CA07	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CN01A	AA39-20068E	LEAD-CONNECTOR,ASSY;-,YBNH025-08,67096-008,8P,500,	
CN05A	AA39-20069A	LEAD-CONNECTOR,ASSY;-,YBNH025-05,67096-005,5P,500,	
CN06A	AA39-20499B	LEAD CONNECTOR-ASSY;-,YBNH025-04,SMP025-04,4P,200,	
JE01	3722-000143	JACK-PHONE;1P(VER),3.4mm,AG,BLK,NO	
JR01	3722-001031	JACK-RCA;3P,3.6mm,#18,AU	
LA02	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA03	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA04	2701-000180	INDUCTOR-AXIAL;33uH,5%,2.5x3.4mm	
LA05	2701-000180	INDUCTOR-AXIAL;33uH,5%,2.5x3.4mm	
RA01	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RA02	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	

ASSY-SOUND

*	AA95-40011H	ASSY-SOUND;-,CK,SCT57B,A2,-,-	
CA101	2401-000254	C-AL;100uF,20%,10V,LL,TP,8x11.5,5mm	
CA102	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
CA103	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
CA104	2401-002042	C-AL;220uF,20%,10V,GP,TP,6.3x11,5mm	
CA105	2301-000148	C-FILM,PEF;10nF,5%,100V,TP,7x3.2x7mm,5mm	
CA106	2301-000235	C-FILM,PEF;3.9nF,5%,50V,TP,6.5x3.0x5.5mm,	
CA107	2301-000530	C-FILM,PEF;100nF,5%,100V,TP,11.5x12.5x6.5	
CA108	2301-000201	C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,5	
CA109	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
CA110	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
CA111	2401-000416	C-AL;10uF,20%,16V,GP,TP,5x11,5mm	
CA112	2401-000416	C-AL;10uF,20%,16V,GP,TP,5x11,5mm	
CA113	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA114	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA115	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA116	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA117	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA118	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA119	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
CNA01	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	
CNA02	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	
ICA01	1204-000515	IC-SOUND PROCESSOR;TDA9840/V2,DIP,20P,324MIL,PLAS	
ICA02	1204-001294	IC-DEMODULATOR;TDA9820,DIP,16P,300MIL,PLASTIC	
LA101	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA102	2702-000131	INDUCTOR-RADIAL;2.2mH,5%,6.2x7.4mm	
RA101	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RA102	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA103	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA104	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA105	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RA108	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
XA101	2801-000125	CRYSTAL-UNIT;10MHz,20ppm,28-AAM,32pF,30ohm,	
ZA101	2903-000185	FILTER-CERAMIC;BP,5.5MHz,+-75KHz,6dB,-,TP,-	
ZA102	2903-000185	FILTER-CERAMIC;BP,5.5MHz,+-75KHz,6dB,-,TP,-	
ZA106	2903-000307	FILTER-CERAMIC;BP,6.25MHz,50KHz,6.0dB,-,TP,-	
ZA107	2903-000307	FILTER-CERAMIC;BP,6.25MHz,50KHz,6.0dB,-,TP,-	

ASSY-PCB,PIP TTX

*	AA95-90030J	ASSY-PCB,PIP TTX;-,22-Q,SCT57B,SAA5261,CIS,-	
CNP01	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	

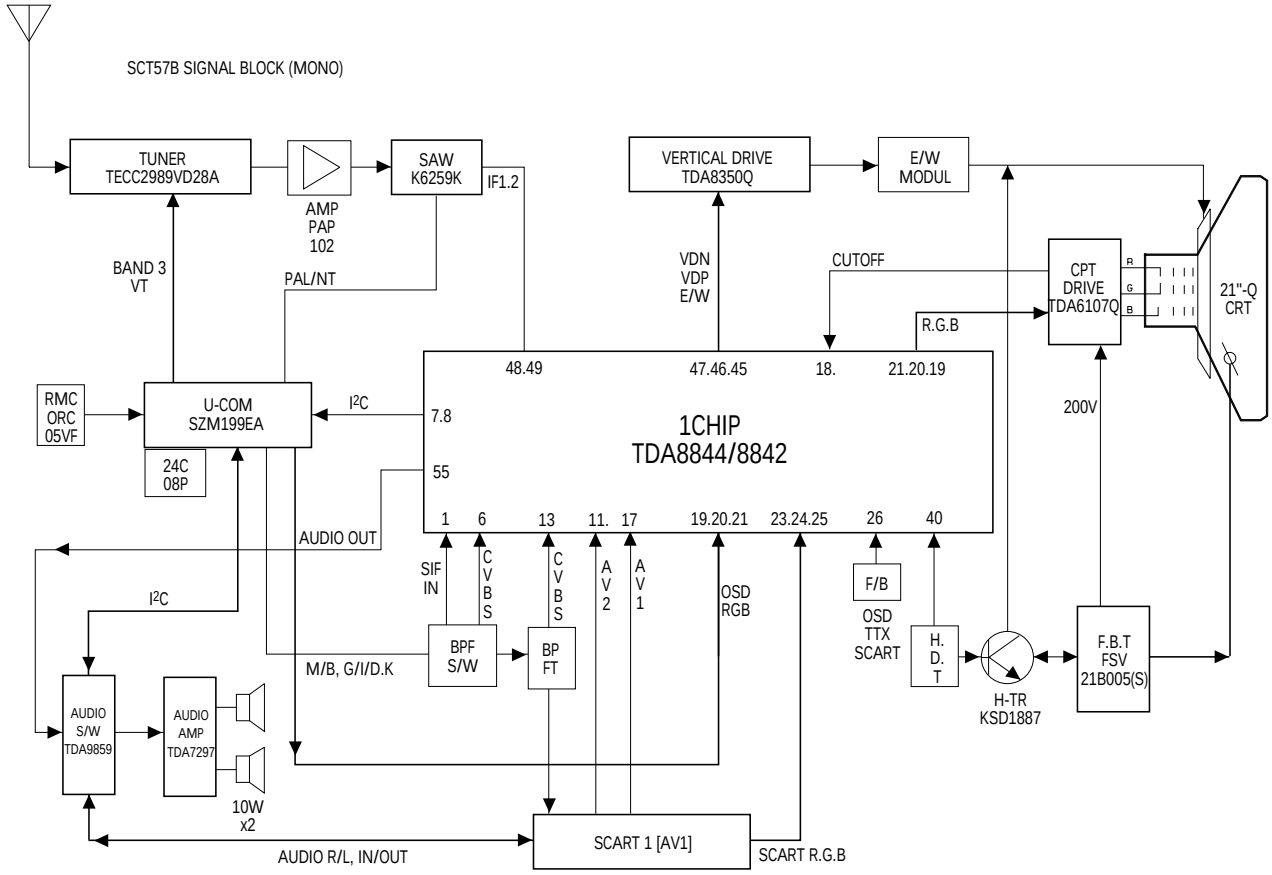
Loc. No.	Code No.	Description ; Specification	Remark
CNT01	3711-002702	CONNECTOR-HEADER;NOWALL,4P,1R,2.5mm,ANGLE,SN	
CNT02	3711-002703	CONNECTOR-HEADER;NOWALL,5P,1R,2.5mm,ANGLE,SN	
CNT03	3711-002705	CONNECTOR-HEADER;NOWALL,7P,1R,2.5mm,ANGLE,SN	
CP01	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP02	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP03	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP04	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP05	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP06	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP07	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP08	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP09	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP10	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP11	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP12	2203-000323	C-CERAMIC,CHIP;12nF,10%,50V,X7R,TP,2012,-	
CP13	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP14	2401-001515	C-AL;47uF,20%,16V,WT,TP,6x11mm,5mm	
CP15	2203-002232	C-CERAMIC,CHIP;3.3nF,20%,50V,X7R,TP,2012,-	
CP16	2203-000751	C-CERAMIC,CHIP;330nF,+80-20%,16V,Y5V,TP,2012,	
CP17	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP18	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP19	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP20	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP21	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP22	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012,-	
CP23	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,-	
CP24	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP25	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP26	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
CP27	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
CP28	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
CP29	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP30	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP31	2401-000242	C-AL;100uF,20%,10V,GP,TP,6x11,5mm	
CP32	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP33	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP34	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP35	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP36	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,-	
CP37	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
CP38	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP39	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP40	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP41	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP42	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
CP43	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP44	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP45	2201-000273	C-CERAMIC,DISC;18pF,5%,50V,CH,TP,5x3mm,5	
CP46	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP47	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CT01	2401-000242	C-AL;100uF,20%,10V,GP,TP,6x11,5mm	
CT02	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT04	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT05	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT06	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT07	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
CT08	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT09	2203-000295	C-CERAMIC,CHIP;10pF,5%,50V,NPO,TP,2012,-	
CT10	2203-000295	C-CERAMIC,CHIP;10pF,5%,50V,NPO,TP,2012,-	
CT11	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT12	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
DP01	0401-000133	DIODE-SWITCHING;RLS4148,100V,200mA,500mW,4nS,S	
DT01	0401-000133	DIODE-SWITCHING;RLS4148,100V,200mA,500mW,4nS,S	
DZP02	0403-000662	DIODE-ZENER;MTZ3.0B,3.0V,3.01-3.22V,500mW,	
ICP01	1001-000223	IC-VIDEO SWITCH;TEA5114A,-,DIP,16P,334MIL,SING	
ICP02	1204-000530	IC-PAL/NTSC DECODER;TDA9160A,DIP,32P,400MIL,PLASTI	
ICP03	1204-001175	IC-PICTURE PROCESS;SDA9288X A141,SOP,32P,-,PLASTI	
ICT01	1204-001401	IC-PAL DECODER;SAA5261PS/102,DIP,52P,600MIL,P	
ICT02	1103-000128	IC-EEPROM;24C02,256*8BIT,DIP,8P,300MIL,1	
ICT03	1203-000641	IC-RESET;7442,TO-92,3P,-,PLASTIC,-0.3/7	
JP01	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JP02	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JT01	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JT02	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
LP01	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP05	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP09	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP10	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP11	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LT01	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
QP01	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP02	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP03	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP04	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP05	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP06	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP07	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP08	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP09	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP10	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT01	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT02	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT03	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT04	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
RP01	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP02	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP03	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP04	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP05	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP06	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP07	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP08	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP09	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP10	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012	
RP11	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP12	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP13	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP14	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP15	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP16	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP17	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP18	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP19	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP20	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP21	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP22	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP23	2007-000830	R-CHIP;39Kohm,5%,1/10W,DA,TP,2012	
RP24	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP25	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
RP26	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP28	2007-000001	R-CHIP;68Kohm,5%,1/10W,DA,TP,2012	
RP29	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP30	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP31	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
RP32	2007-000642	R-CHIP;270ohm,5%,1/10W,DA,TP,2012	
RP33	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
RP34	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP35	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP36	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP37	2007-000023	R-CHIP;120ohm,5%,1/10W,DA,TP,2012	
RP38	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
RP39	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
RP40	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP41	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP42	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP43	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP44	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP45	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP46	2007-001009	R-CHIP;51Kohm,5%,1/10W,DA,TP,2012	
RP47	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
RP48	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RP49	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
RP50	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP51	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP52	2007-000728	R-CHIP;300ohm,5%,1/10W,DA,TP,2012	
RP53	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RP54	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP55	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
RP56	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012	
RP57	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
RP58	2007-000703	R-CHIP;3.6Kohm,5%,1/10W,DA,TP,2012	
RP59	2001-001077	R-CARBON(S);150ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RP60	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP61	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

Loc. No.	Code No.	Description ; Specification	Remark
RP62	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012	
RP63	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP64	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP65	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP66	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT01	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT02	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT03	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT04	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT05	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT06	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT07	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
RT08	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
RT11	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT12	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012	
RT13	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT14	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RT15	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
RT17	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RT18	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RT20	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT21	2007-000728	R-CHIP;300ohm,5%,1/10W,DA,TP,2012	
RT22	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT23	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT24	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT25	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT26	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT27	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT28	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT29	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT30	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT31	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
XP01	2801-000276	CRYSTAL-UNIT;4.433619MHz,40ppm,28-AAM,20pF,	
XP02	2801-000235	CRYSTAL-UNIT;3.579545MHz,40ppm,28-AAM,S,75o	
XP03	2801-003485	CRYSTAL-UNIT;21.059153MHz,30ppm,28-ABQ,17pF	
XT01	2801-003433	CRYSTAL-UNIT;12MHz,30ppm,28-AAA,30pF,30ohm,	

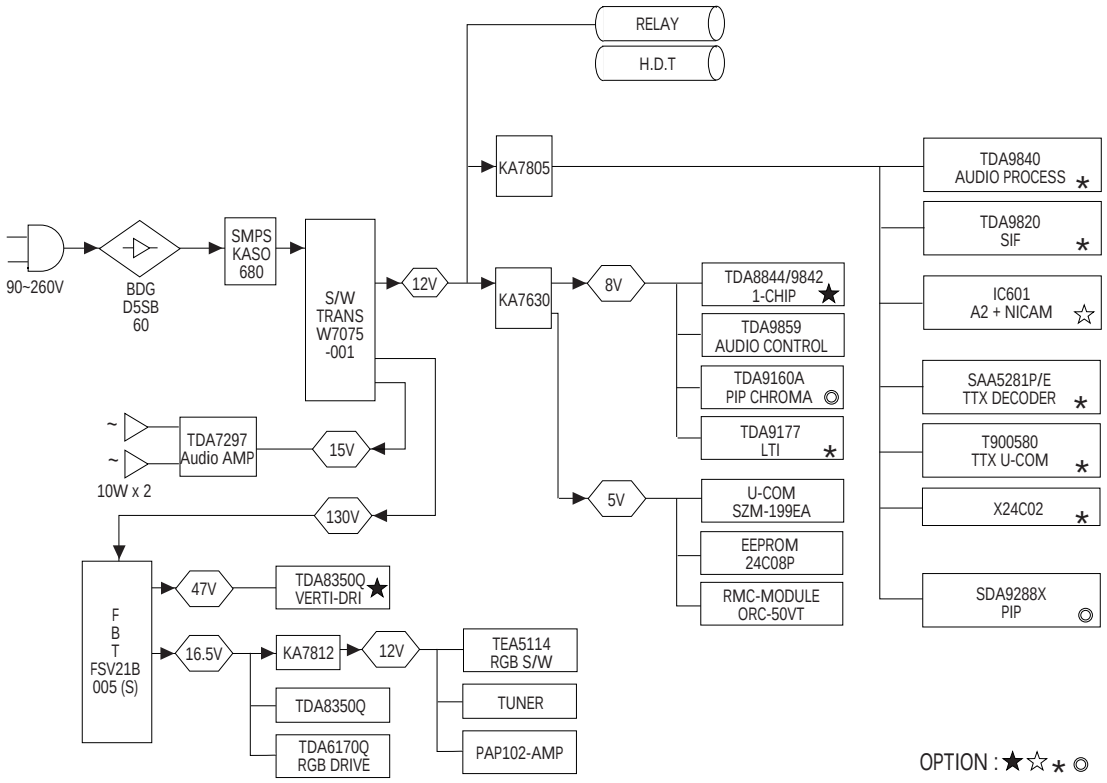
Loc. No.	Code No.	Description ; Specification	Remark
		ASSY-POWER,CORD	
⚠	AA39-10006X	POWER-CORD;-,KKP419C,KLCE-2F,2.286MT,3P,V	
	AA61-20284A	HOLDER;-,P-CORD,PP,VO,BLK,KE-002	
		REMOCON	
*	AA59-10084S	REMOCON;-,TM48,RM155AR,47,L/GRY,SS	
		ASSY-HOLDER,SPK	
*	AA91-60207A	ASSY-HOLDER,SPK;-,M-PP,HB,BLK/HORN,168mm,8R15W	
		ASSY-CRT	
⚠	AA03-10026K	CRT-COLOR;-,A53QCA891X(B),+380mG,21,90d	
⚠	AA27-50004N	DEFLECTION-YOKE;-,DSQ-2192AL,21/A53QCA691X,SH	
	AA27-60001K	MAGNET-CONVERGENCE;-,NY-291,29.1mm	
	AA63-60028A	SPACER-DY;NEOPRENE,-,BLK,V0 W12,-,-	
		ASSY-ACCESSORY	
	AA26-90001C	TRANS-MATCHING;-,300ohm/75ohm,PAL,40-890MHz	
	AA42-10001V	ANT-ROD;-,3S,620mm,BRN,UL/CSA	
	AA68-11204A	MANUAL-USERS;SCT57B,RUSSIA,TM51,B5,W/P 100(	

8. Block Diagram

8-1 Signal Block

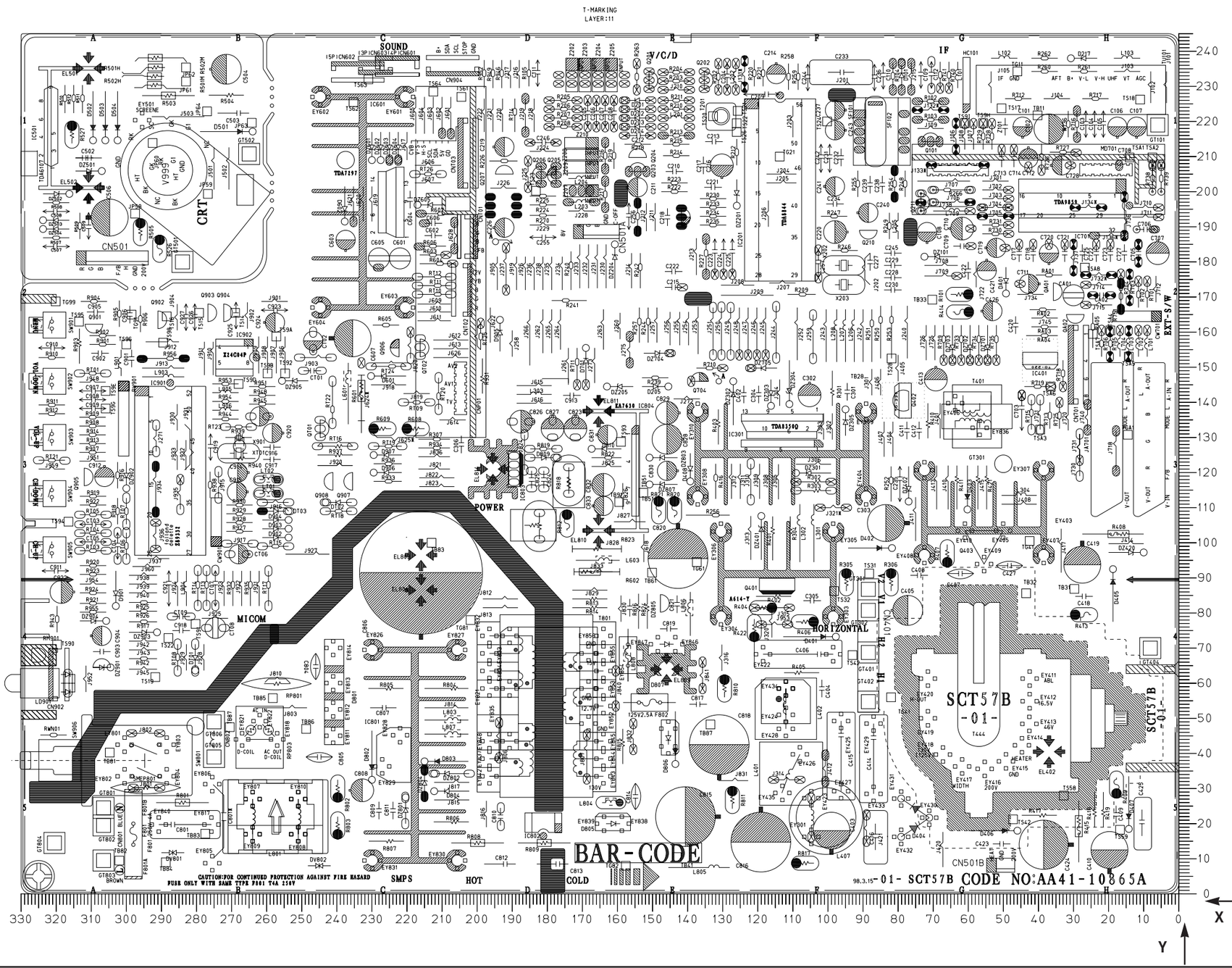


8-2 Power Block



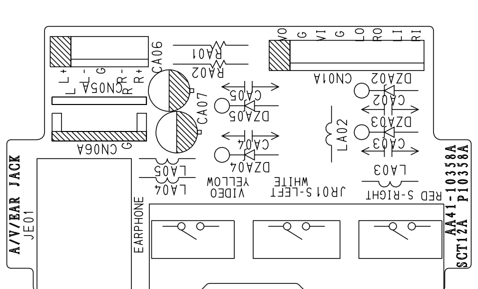
9. PCB Layout

9-1 PCB MAIN

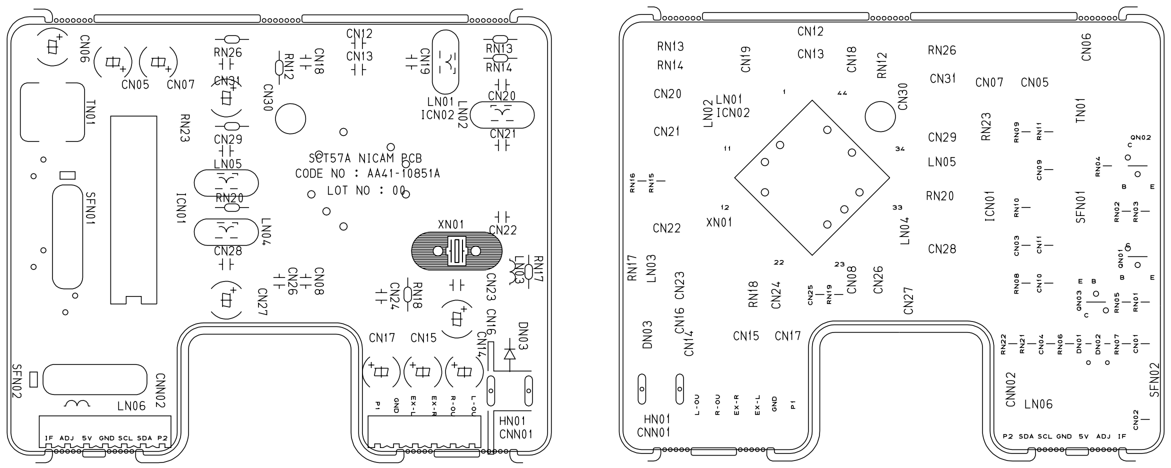


Loc. No.	X	Y
DIODE		
D101	79	236
D201	158	226
D202	158	223
D203	158	221
D204	158	218
D205	145	144
D217	30	238
D401	97	73
D402	81	98
D403	60	109
D404	79	16
D405	18	92
D406	46	18
D407	14	18
D408	139	117
D501	264	217
D502	309	214
D503	306	214
D504	302	214
D601	230	147
D602	237	191
D701	169	155
D801	241	45
D802	230	32
D803	215	37
D804	212	29
D805	158	20
D806	143	37
D807	146	64
D809	177	124
D810	167	126
D901	303	82
D902	253	101
D903	253	104
D904	253	106
D905	193	163
D906	229	120
D907	229	125
DA01	49	171
DT01	280	63
DT02	243	111
DT03	253	109
DV801	290	11
DV802	241	8
DZ101	72	181
DZ201	126	196
DZ204	160	185
DZ205	163	144
DZ301	109	119
DZ302	127	146
DZ303	116	139
DZ304	111	139
DZ305	95	138
DZ401	119	107
DZ402	77	111
DZ420	10	97
DZ421	188	193
DZ501	307	205
DZ502	316	199
DZ503	323	191
DZ504	323	189
DZ601	230	209
DZ602	227	209
DZ603	225	209
DZ604	222	209
DZ605	217	196
DZ701	54	152
DZ702	59	152
DZ703	64	152
DZ704	145	154
DZ705	122	149
DZ801	220	27
DZ802	212	34
DZ803	150	124
DZ804	215	35
DZ805	147	80
DZ807	150	116
DZ901	304	64
DZ902	300	115
DZ903	291	74
DZ904	305	77
DZ905	255	146
IC		
HC101	60	224
IC201	105	224
IC301	137	137
IC401	42	152
IC501	310	201
IC601	220	227
IC701	17	190
IC801	229	9
IC802	185	19
IC803	195	121
IC804	165	137
IC901	279	142
IC902	265	148
TRANSISTOR		
Q101	68	214
Q201	151	229
Q202	135	229
Q203	151	205
Q204	151	209
Q205	177	207
Q206	181	207
Q207	189	205
Q210	91	189
Q211	73	194
Q401	98	79
Q402	78	143
Q403	38	96
Q704	134	146
Q901	311	162
Q902	291	161
Q903	276	163
Q904	272	163
Q905	312	116
Q906	222	158
Q907	235	120
Q908	241	120
Q909	141	190
QA01	35	169
QA02	32	165

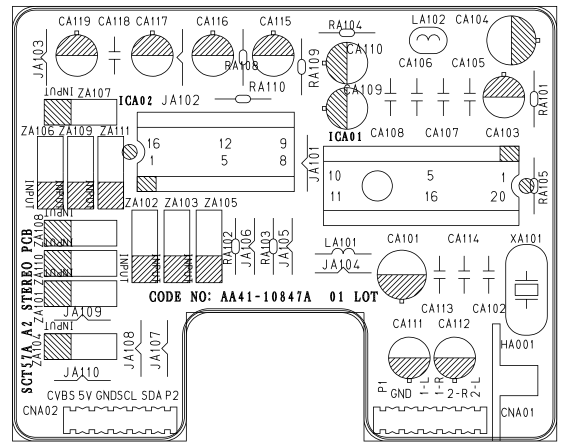
9-2 PCB-A/V



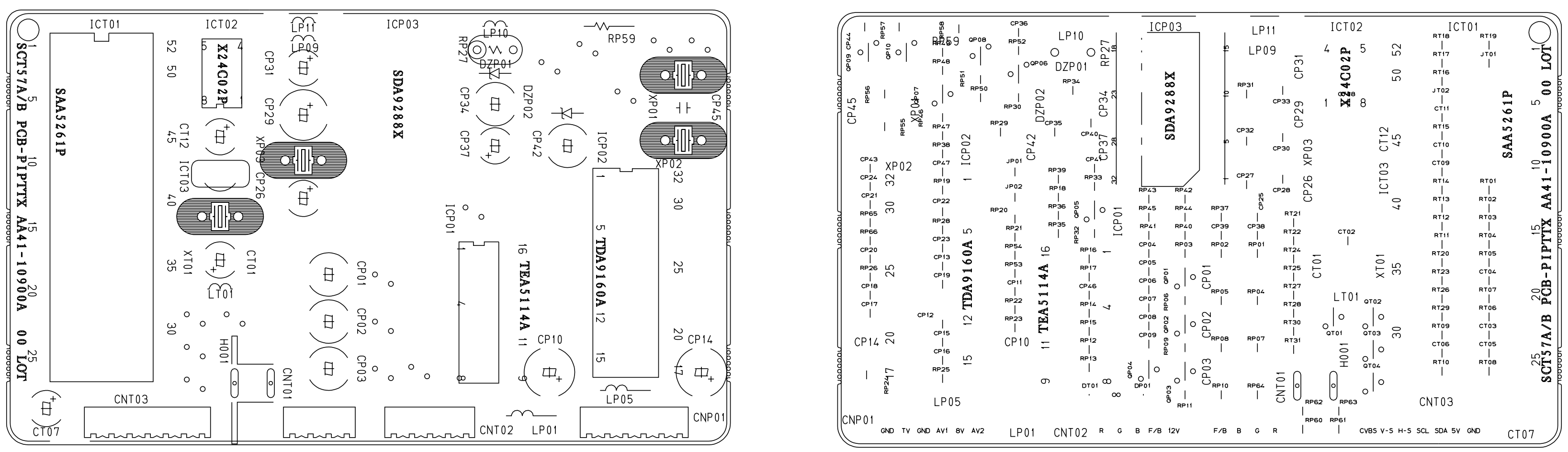
9-3 PCB-NICAM



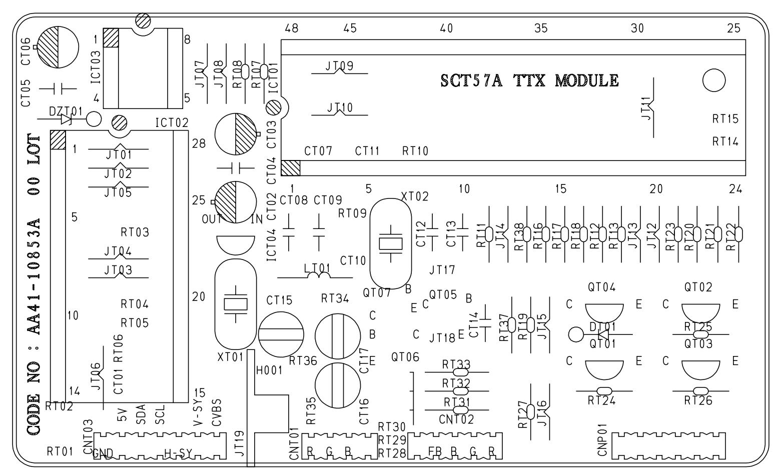
9-4 PCB-STEREO



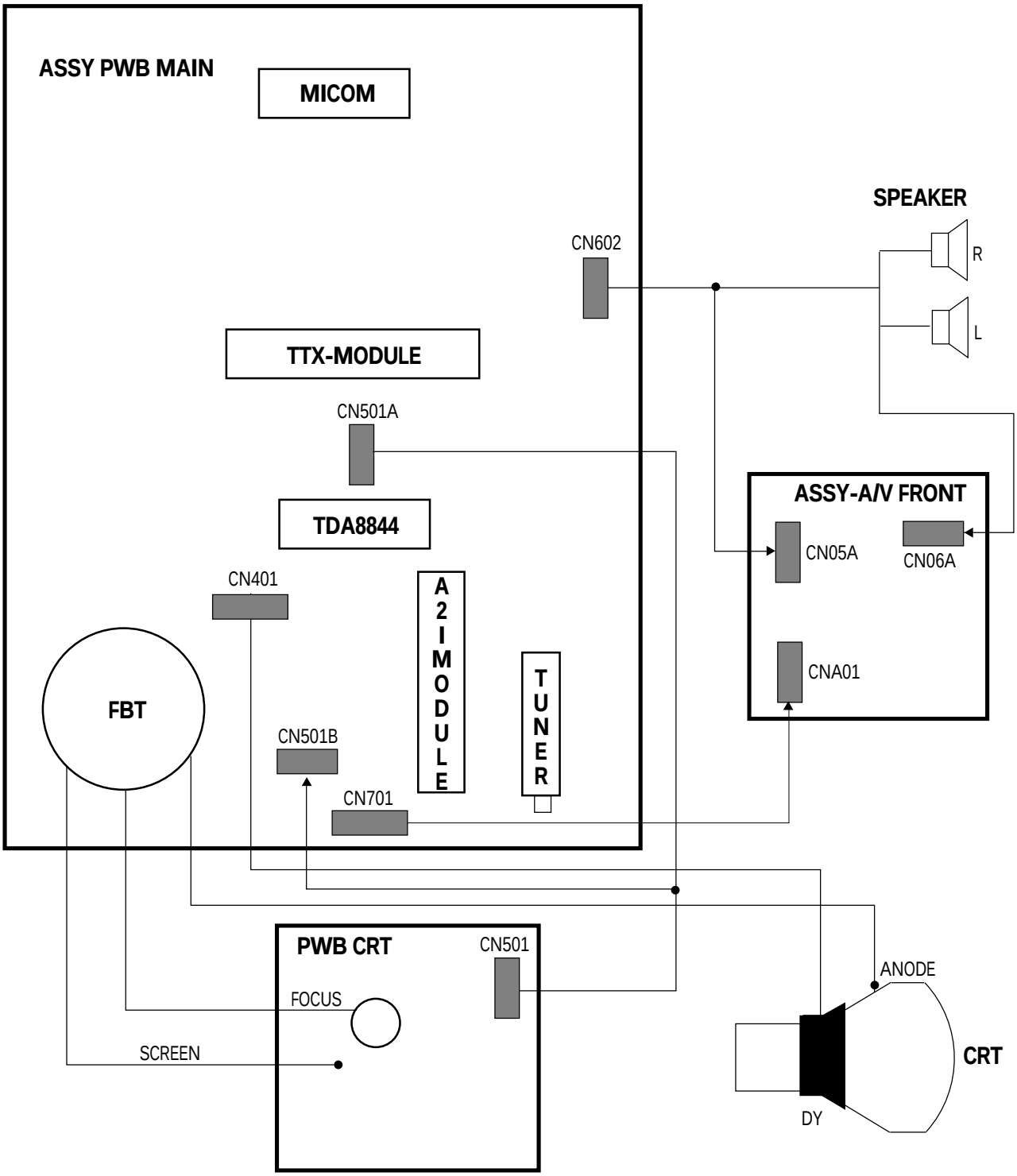
9-5 PCB-PIP



9-6 PCB-TTX

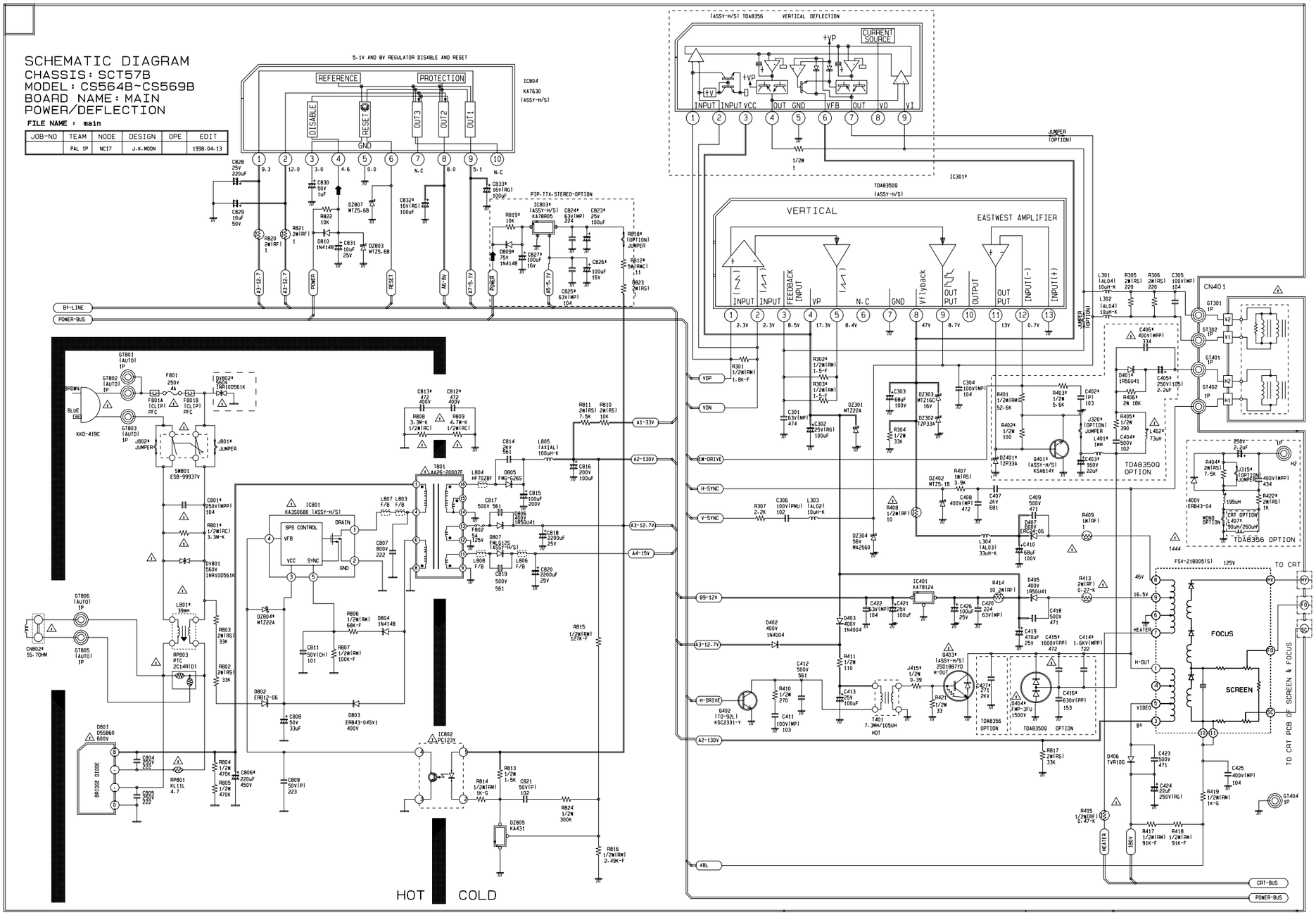


10. Wiring Diagram

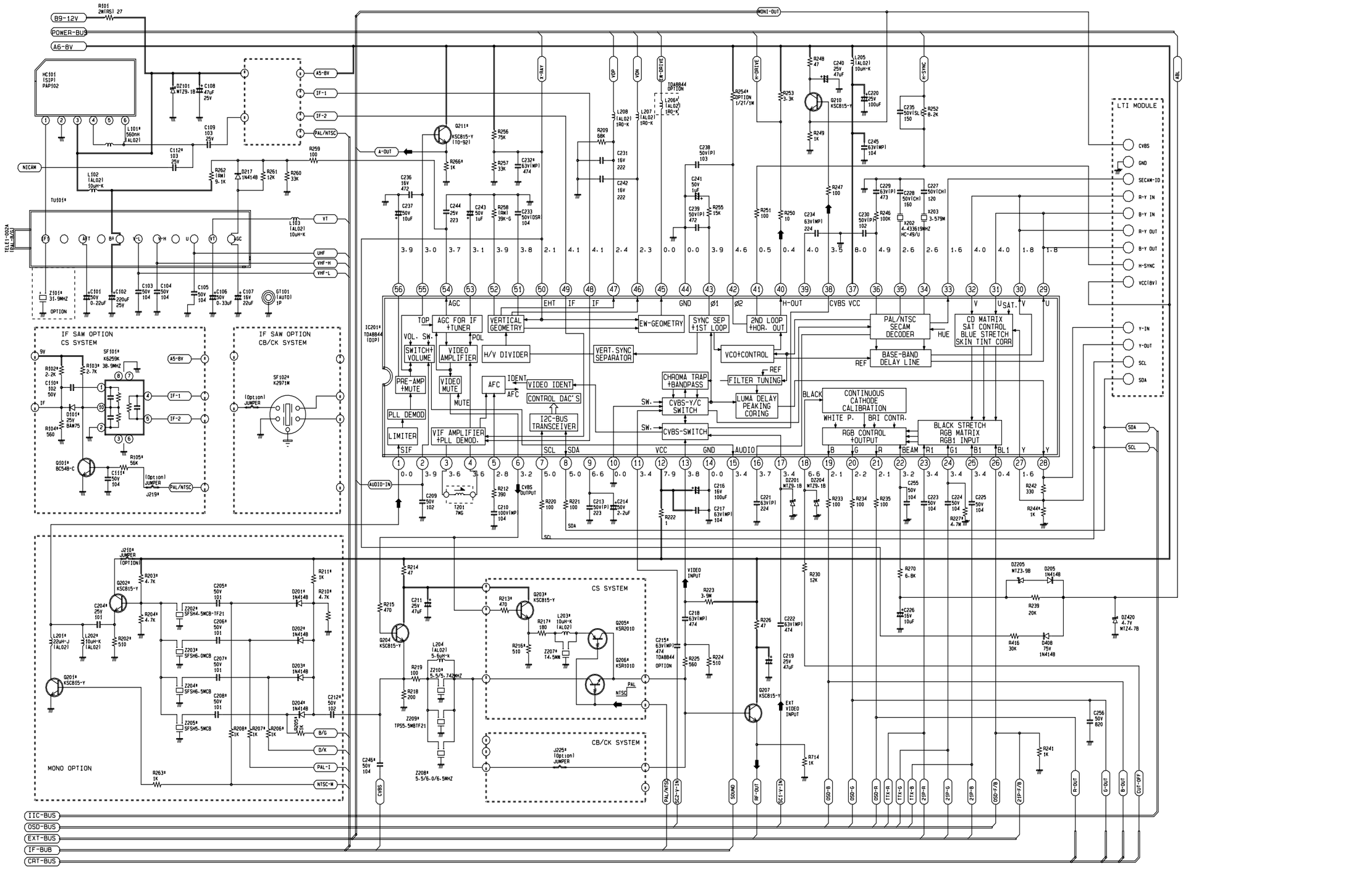


11. Schematic Diagrams

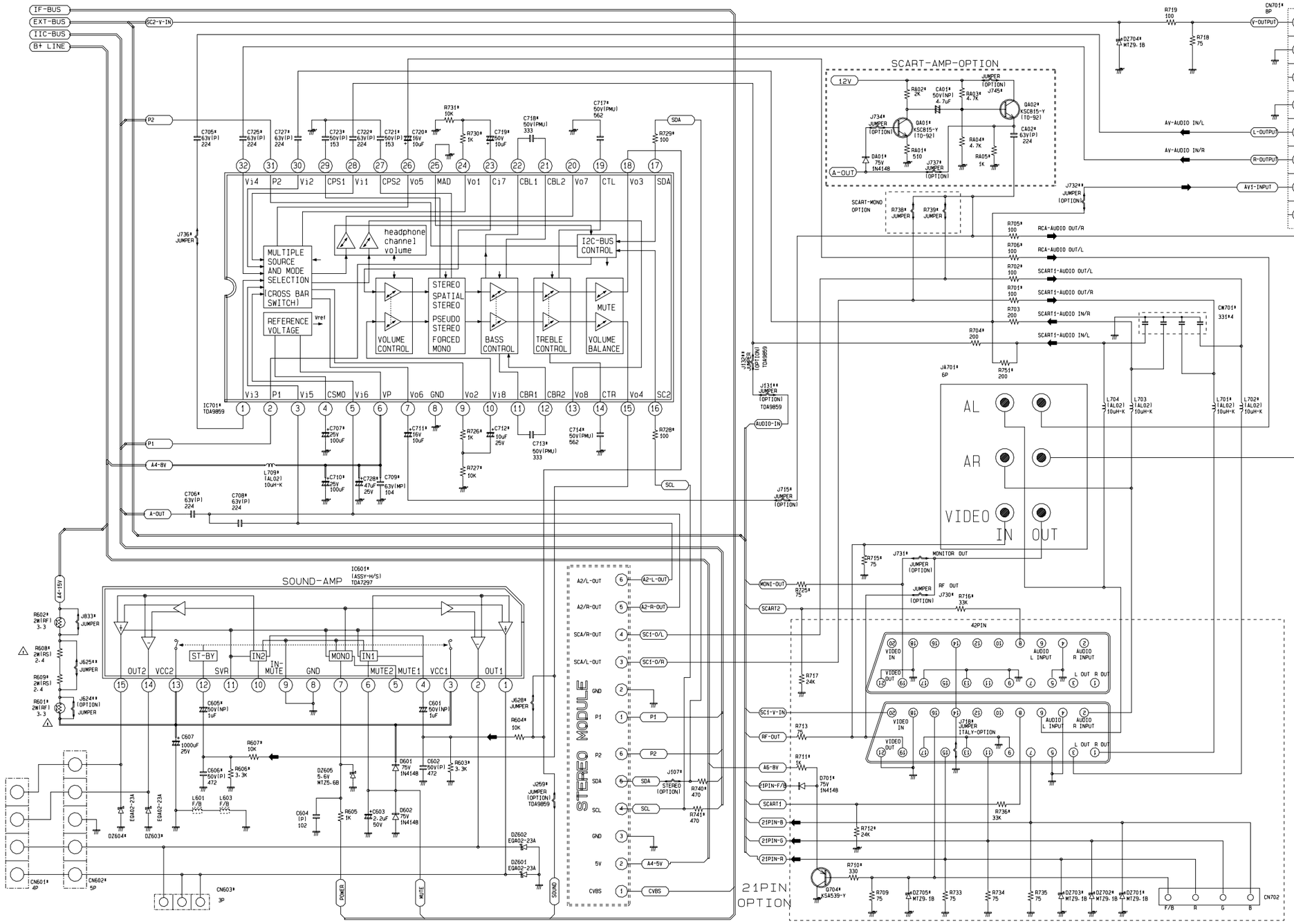
11-1 MAIN-POWER



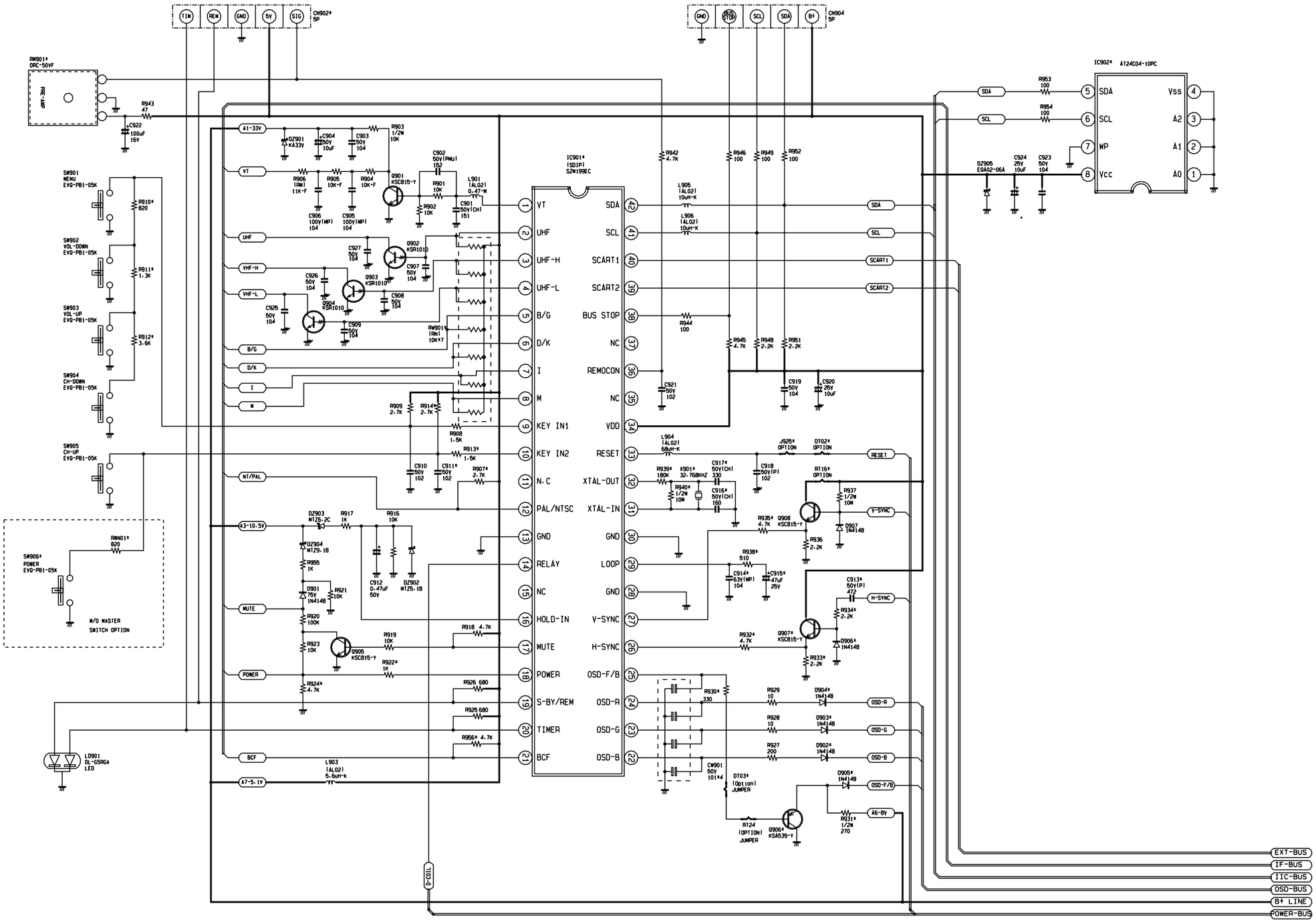
11-2 MAIN-CHROMA



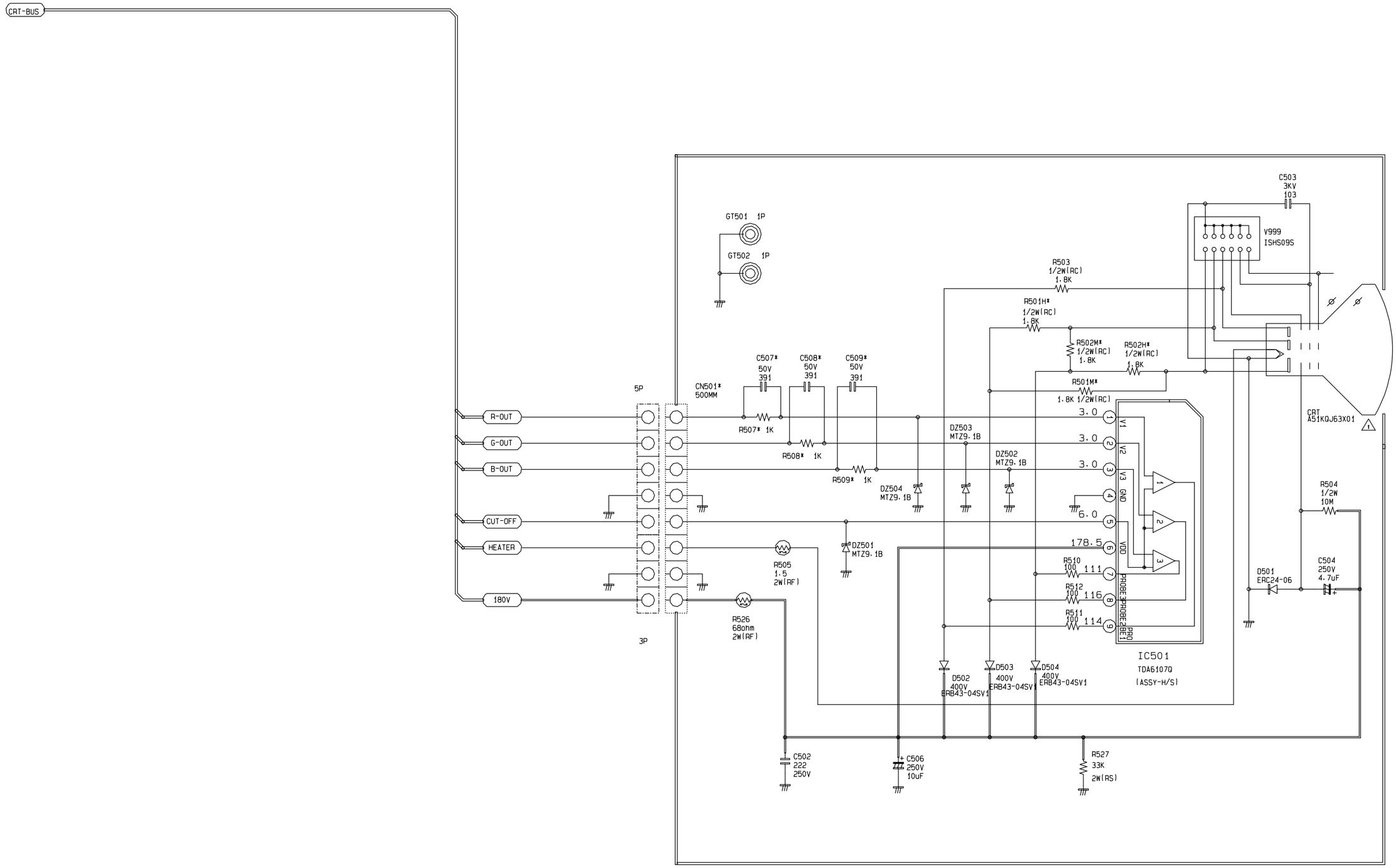
11-3 MAIN-AUDIO



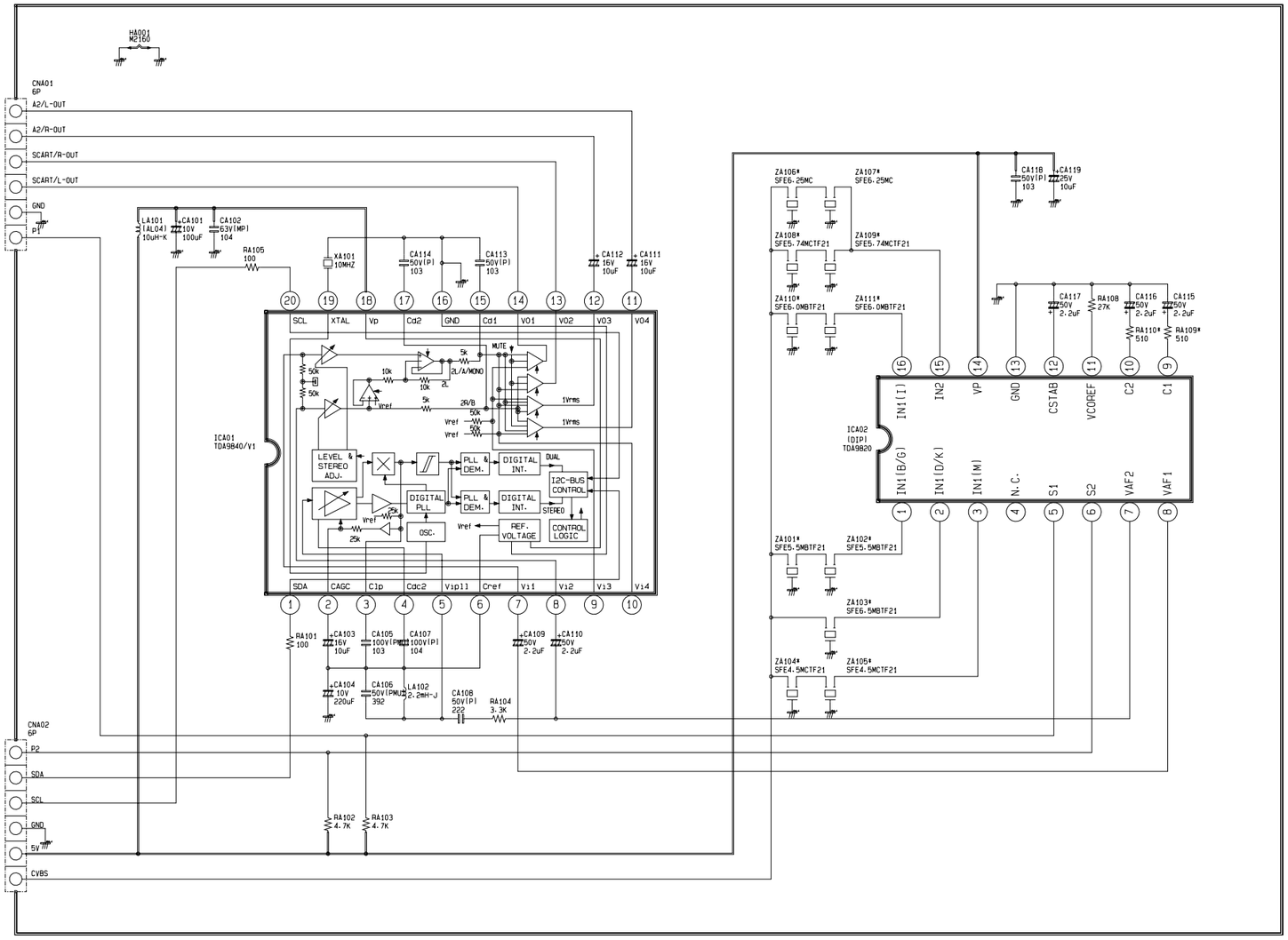
11-4 MAIN-U-COM



11-5 MAIN-CRT


CRT-BUS
R-OUT
G-OUT
B-OUT
CUT-OFF
HEATER
180V
5P
3P
CN501*
500MM
GT501 1P
GT502 1P
C507*
50V
391
C508*
50V
391
C509*
50V
391
R507* 1K
R508* 1K
R509* 1K
DZ504
MTZ9.1B
DZ503
MTZ9.1B
DZ502
MTZ9.1B
DZ501
MTZ9.1B
R505
1.5
2W(RF)
R526
68ohm
2W(RF)
C503
3KV
103
V999
ISHS09S
R503
1/2W(RC)
1.8K
R501H*
1/2W(RC)
1.8K
R502M*
1/2W(RC)
1.8K
R502H*
1/2W(RC)
1.8K
R501M*
1.8K 1/2W(RC)
3.0
3.0
3.0
6.0
178.5
R510
100
111
R512
100
116
R511
100
114
V1
V2
V3
GND
VDD
PROBE3
PROBE2
PROBE1
IC501
TDA6107Q
(ASSY-H/S)
D502
400V
ERB43-04SV1
D503
400V
ERB43-04SV1
D504
400V
ERB43-04SV1
CRT
A51KQJ63X01
R504
1/2W
10M
C504
250V
4.7uF
D501
ERC24-06
C502
222
250V
C506
250V
10uF
R527
33K
2W(RS)

11-6 STEREO SIF



LOGIC TABLE

STANDARD	P1 PIN5	P2 PIN6	FREQUNCY VCO1	FREQUNCY VCO2
B/G	1	1	5.5MHZ	5.74MHZ
NTSC-M	1	0	4.5MHZ	
PAL-I	0	1	6.0MHZ	
D/K	0	0	6.5MHZ	6.25MHZ

CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RM)
Fusible	(RF)
Cement·Wire	(RW)
Network	(RN)

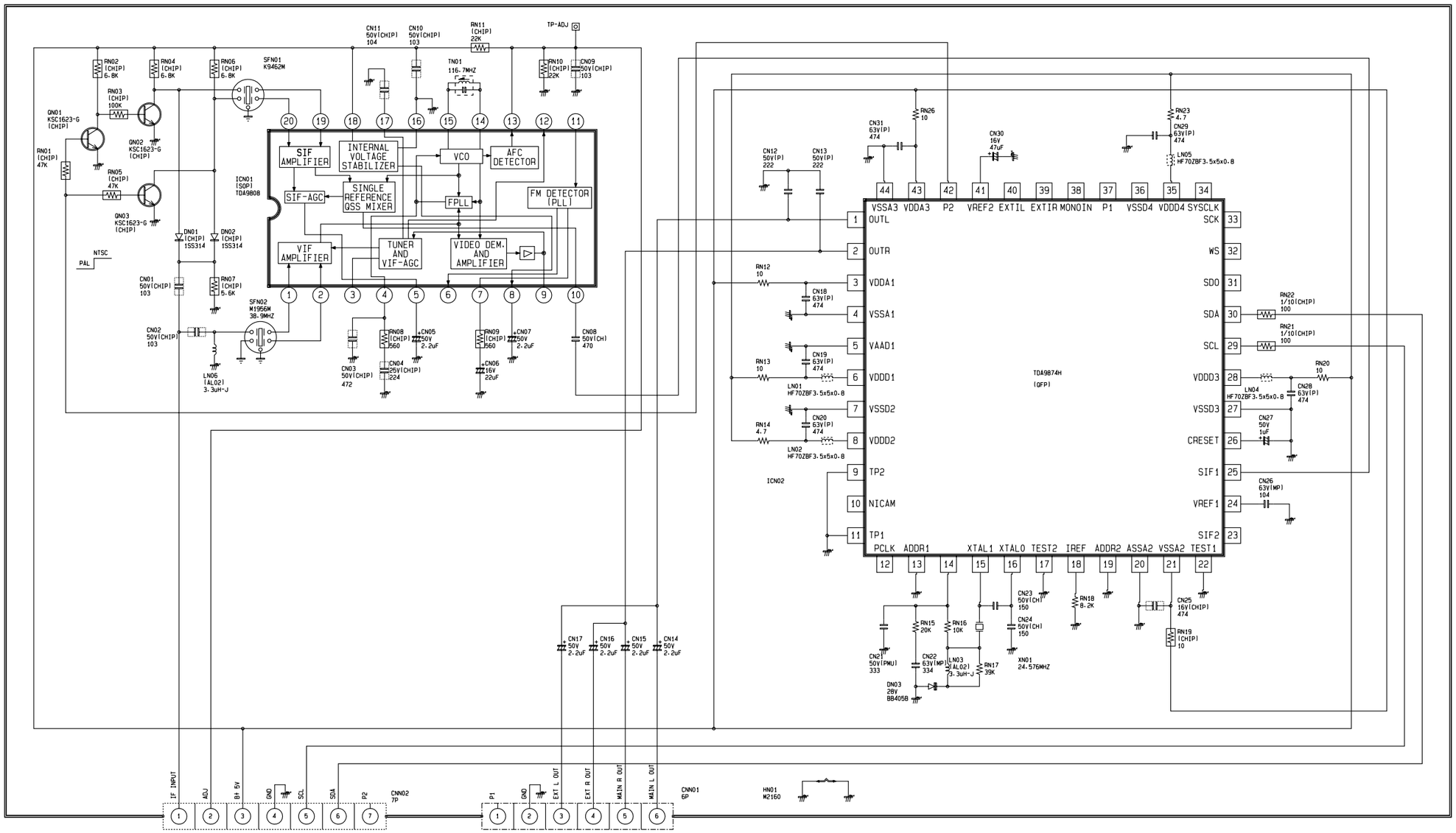
EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000
2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

The circuits are subject to change without notice to improve the picture quality.

11-7 MAIN-NICAM



CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RM)
Fusible	(RF)
Cement-Wire	(RW)
Network	(RN)

EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000

2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.

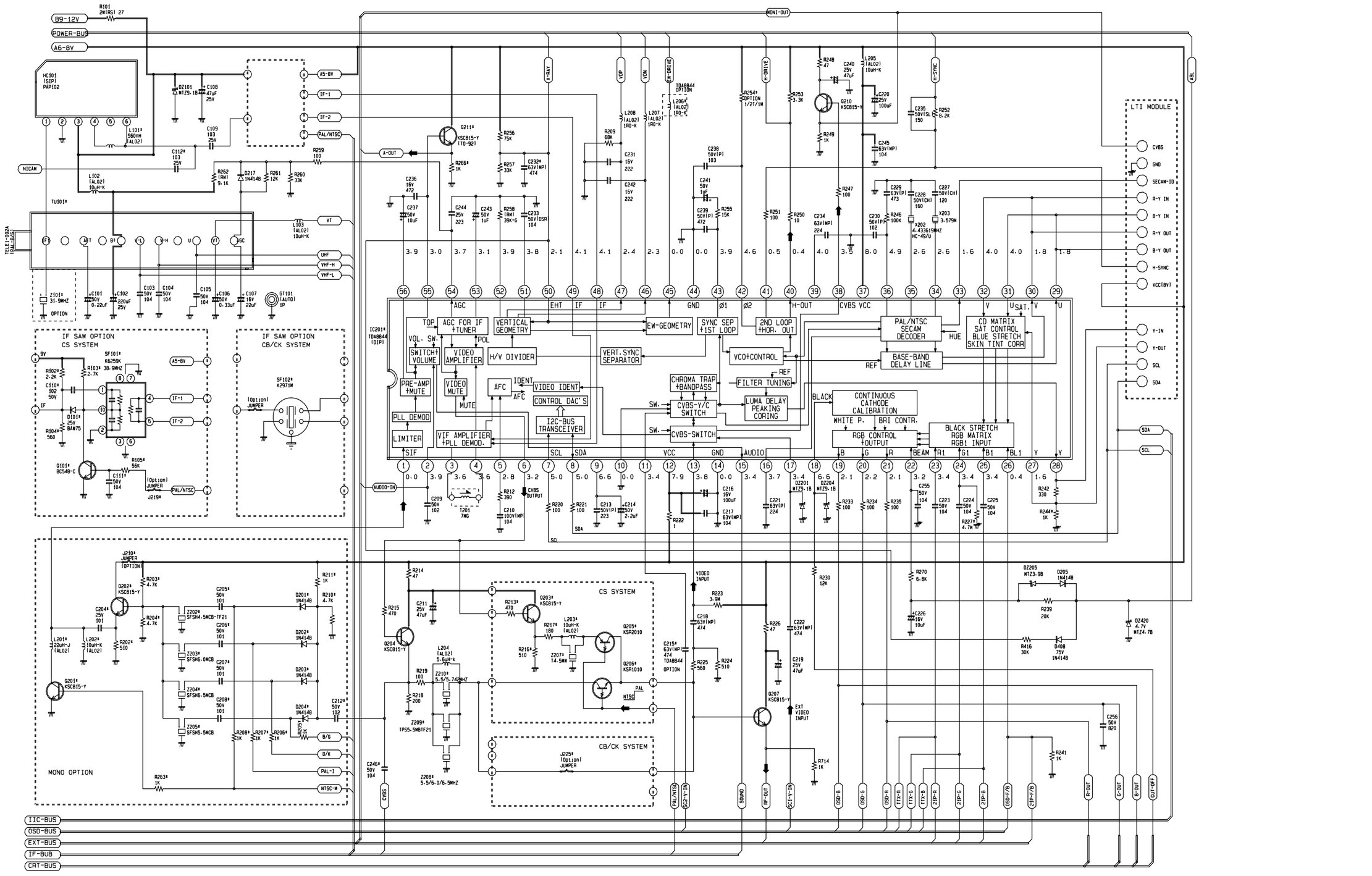
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

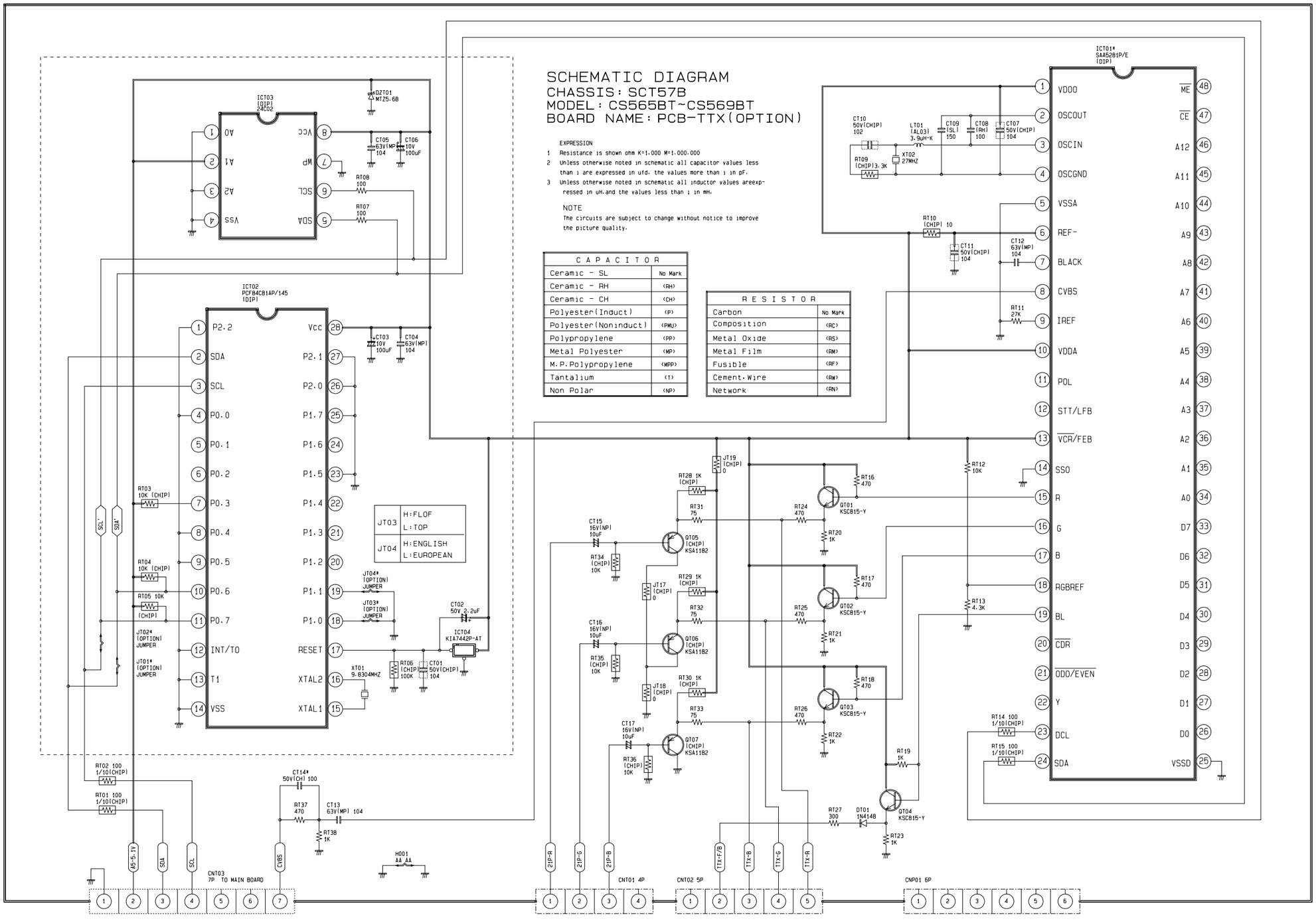
The circuits are subject to change without notice to improve the picture quality.

SCHEMATIC DIAGRAM
CHASSIS: SCT57B
MODEL: CS565BN~CS569BN
BOARD NAME: NICAM

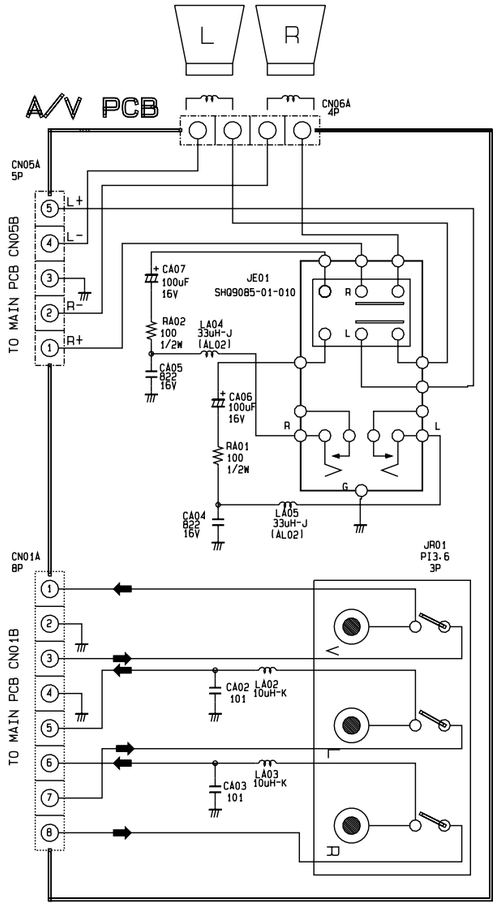
11-8 PIP-TTX


B9-12V
POWER-BUS
A6-8V
A5-8V
IF-1
IF-2
PAL/NTSC
A-OUT
NICAM
VT
UHF
VHF-H
VHF-L
MONI-OUT
ABL
LTI MODULE
CVBS
GND
SECAM-ID
R-Y IN
B-Y IN
R-Y OUT
B-Y OUT
H-SYNC
VCC(8V)
Y-IN
Y-OUT
SCL
SDA
IF SAW OPTION
CS SYSTEM
IF SAW OPTION
CB/CK SYSTEM
MONO OPTION
CS SYSTEM
CB/CK SYSTEM
AGC
EHT
IF
GND
H-OUT
CVBS VCC
AGC FOR IF +TUNER
VERTICAL GEOMETRY
EW-GEOMETRY
SYNC SEP +1ST LOOP
2ND LOOP +HOR. OUT
PAL/NTSC SECAM DECODER
CD MATRIX SAT CONTROL BLUE STRETCH SKIN TINT CORR
BASE-BAND DELAY LINE
VIDEO AMPLIFIER
H/V DIVIDER
VERT.SYNC SEPARATOR
VCO+CONTROL
PRE-AMP +MUTE
VIDEO MUTE
AFC
VIDEO IDENT
CONTROL DAC'S
I2C-BUS TRANSCEIVER
CHROMA TRAP +BANDPASS
FILTER TUNING
LUMA DELAY PEAKING CORING
CVBS-Y/C SWITCH
CVBS-SWITCH
CONTINUOUS CATHODE CALIBRATION
RGB CONTROL +OUTPUT
BLACK STRETCH RGB MATRIX RGB1 INPUT
PLL DEMOD
LIMITER
VIF AMPLIFIER +PLL DEMOD.
SIF
SCL
SDA
VCC
GND
AUDIO
AUDIO-IN
CVBS OUTPUT
VIDEO INPUT
EXT VIDEO INPUT
IIC-BUS
OSD-BUS
EXT-BUS
IF-BUB
CRT-BUS

11-9 TTX OPTION



11-10 PCB-A/V



EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000
2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

The circuits are subject to change without notice to improve the picture quality.

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RW)
Fusible	(RF)
Cement.Wire	(RW)
Network	(RN)

CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : SCT57B
Model: CK569BGT1X/BWT
CK569BGT1X/VWT

SERVICE Manual

COLOR TELEVISION RECEIVER

CONTENTS

1. Precautions
2. Specifications and IC Data
3. Disassembly and Reassembly
4. Alignment and Adjustment
5. Troubleshooting
6. Exploded View and Parts List
7. Electric Parts List
8. Block Diagram
9. PCB Layout Diagram
10. Wiring Diagram
11. Schematic Diagrams

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances),* and Underwriters Laboratories *(UL Publication UL1410, 59.7).*

5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

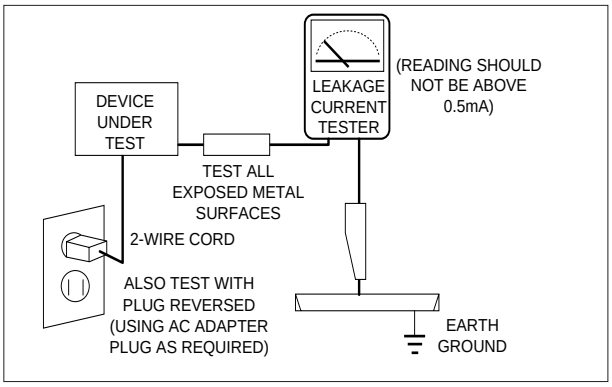

LEAKAGE CURRENT TESTER
(READING SHOULD NOT BE ABOVE 0.5mA)
DEVICE UNDER TEST
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.

7. X-ray Limits:
   The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.

8. High Voltage Limits:
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

   Heed the high voltage limits. These include the *X–ray Protection Specifications Label,* and the *Product Safety and X-ray Warning Note* on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

10. Design Alteration Warning:
    Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

11. Hot Chassis Warning:
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.

13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.

14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.

15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

16. Picture Tube Implosion Warning:
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

18. Product Safety Notice:
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, ( ) or (⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

WARNING1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

WARNING2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static"; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CI	PAL-I (UHF)
CII	PAL-I (VHF/UHF)
CX	PAL-B/G, SECAM-B/G
CK	PAL-B/G, D/K, SECAM-B/G, D/K
CW	PAL-B/G, D/K, SECAM-B/G, D/K, NT 4.43
CS	PAL-B/G, D/K, SECAM-B/G, D/K, NT4.43, NT3.58

Channels:

System / Band	PAL/SECAM-B/G,I	PAL, SECAM- D/K	SECAM-K1, PAL-D	NTSC - M
VHF	2 - 12	1 - 13	2 - 9	2 - 13
UHF	21 - 69	21 - 69	13 - 57	14-69

Intermediate Frequencies (MHz) :

SYSTEM / IF Carrier Frequency	PAL/ SECAM- B/G	PAL/SECAM-D/K, SECAM-K1	PAL - I	NTSC - M
Picture IF Carrier	38.90	38.90	38.90	38.90
Sound IF Carrier	33.40	32.40	32.90	34.40
Color Sub Carrier	34.47	34.47	34.47	35.32

Picture Tube:

14 Inch	A34KQV42X	Quick start, in-line-gun,
20 Inch	A48KRD82X	Black stripe, 90° degree deflection
22 Inch	A53QCA891X	

Power Requirements: AC 100 ~ 260V, 50/60Hz or AC 160 ~ 260V, 50/60Hz

Antenna Input Impedance: VHF, UHF : Telescopic dipole antenna (75 ohm unbalanced type)

Speaker Impedance 10W + 10W/8 ohm, 3W/16 ohm, 5W + 5W/16 ohm

2-2 IC Line Up

Table 2-1 IC Line Up

Loc No.	No.	Specification	Description	Remarks
HIC101	1	PAP102T	IF PRE-AMP	
IC202	2	TDA8844	PAL-B/G, SECAM-B/G,NTSC, SECAM-L	
		TDA8843	PAL-B/G, SECAM-B/G, SECAM-L	
		TDA8375A	PAL-B/G, SECAM-B/G, NTSC, SECAM-L, E/W ADJ.	
		TDA8375	PAL-B/G, SECAM-B/G, NTSC, SECAM-L, E/W ADJ.,16:9	
IC301	3	TDA8350Q	VERTICAL DEFLECTION AMP	
IC401	4	KA7812	REGULATOR (12V)	
IC501	5	TDA6107Q	RGB DRIVE AMP	
IC601	6	TDA7297	SOUND-AMP (10W+10W)	
IC701	7	TDA9859	AUDIO PROCESSOR	
IC801	8	KA3S0680 KA3S0880	POWER IC 6A, 800V POWER IC 8A, 800V	
IC802	9	LTV817B	PHOTO COUPLER	
IC803	10	KA78R05	REGULATOR IC	
IC804	11	KA7630	REGULATOR (5V, 8V)	
ICT01	12	SAA5281 P/E SAA5281 P/H	TTX-DECODER	RUSSIAN
IC901	13	SZM-199EA SZM-199ER	μ-com	
IC902	14	AT24C04 AT24C08	E^2-PROM	
ICA01	15	TDA9840	SOUND PROCESSOR	SOUND MODULE
ICA02	16	TDA9820	INTER-CARRIER SOUND DEMODULATOR	SOUND MODULE
IC6001	17	TDA9874H	NICAM+A2 SOUND DEMODULATOR	SOUND MODULE
ICL101	18	TDA9177	Y.U.V TRANSIENT IMPROVEMENT PROCESSOR	

Option: OSD Language

Table 2-2			
Loc No.	Specification	Description	Remarks
IC901	SZM-199EA	ENG/ARAB/FRENCH	
	SZM-199EC	ENG/CHINESE	
	SZM-199EW	ENG/CRO/BUL/POLISH/RUMANIAN/CZECH/CRO	
	SZM-199EE	ENG/GER/FRENCH/SPANISH/SWEDISH/DUTCH/ITALIAN	
	SZM-199ET	ENG/MAL/IND/VIETNAMESE/THAI	
	SZM-199ER	ENG/RUSSIAN	

2-3 Semiconductor Base Diagrams

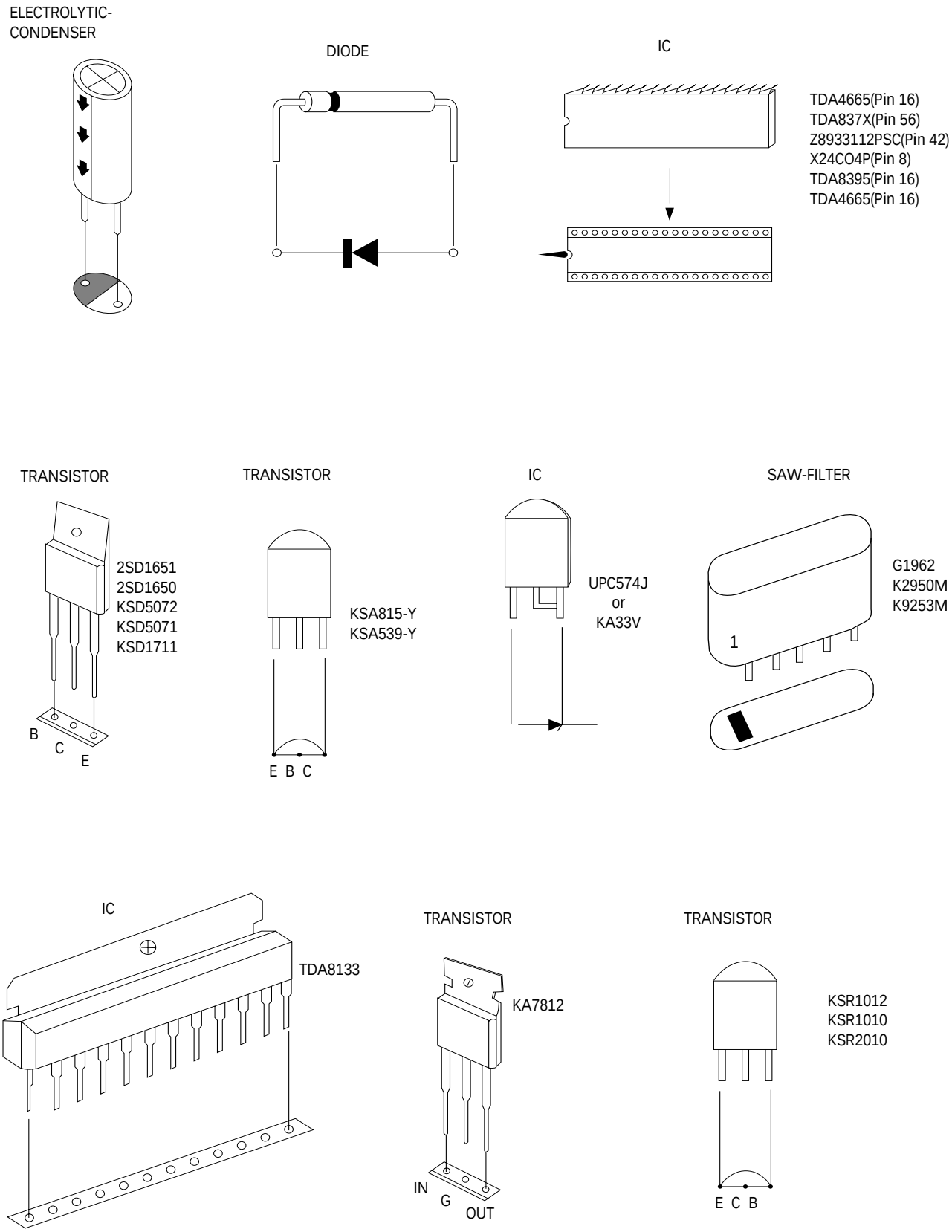
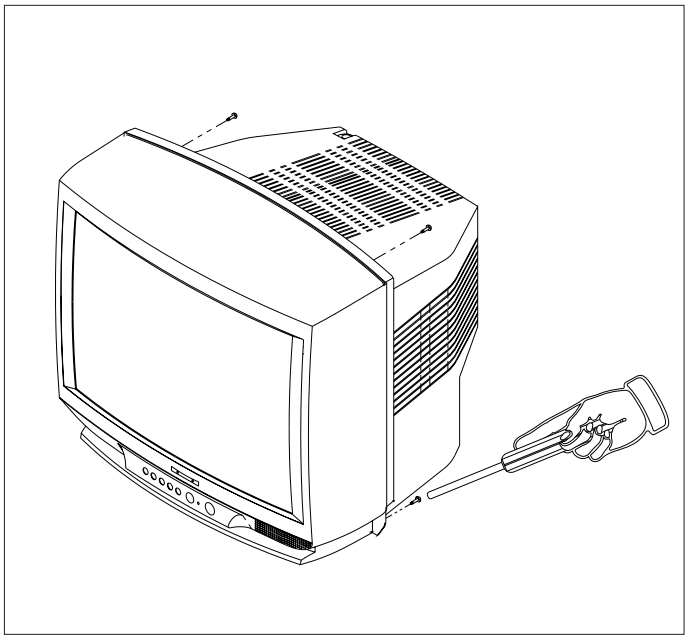


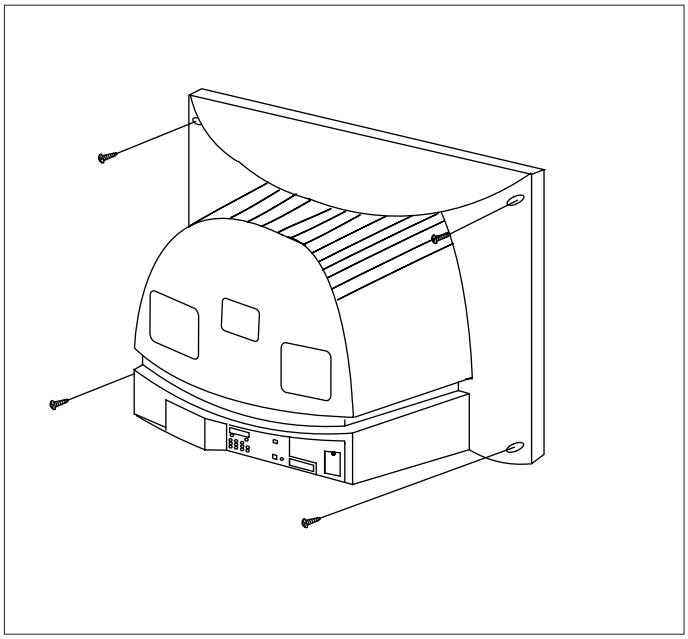
Fig.2-1 Semiconductor Base Diagrams

3. Disassembly and Reassembly

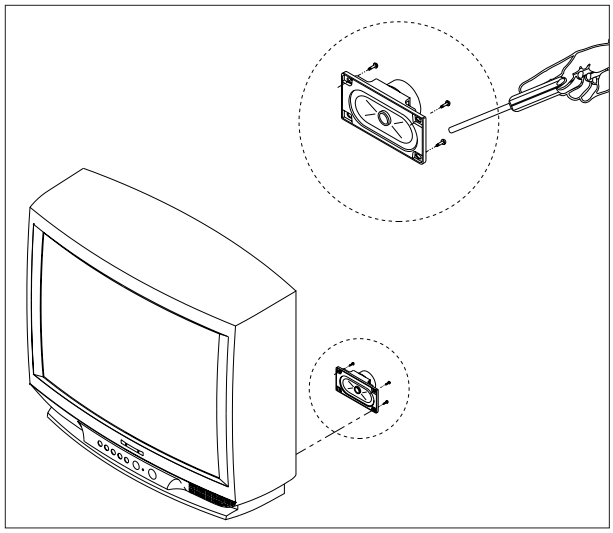
3-1 Back Cover Removal

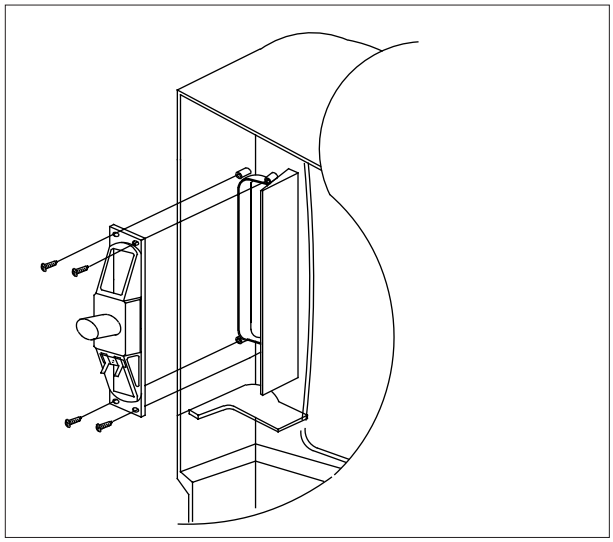


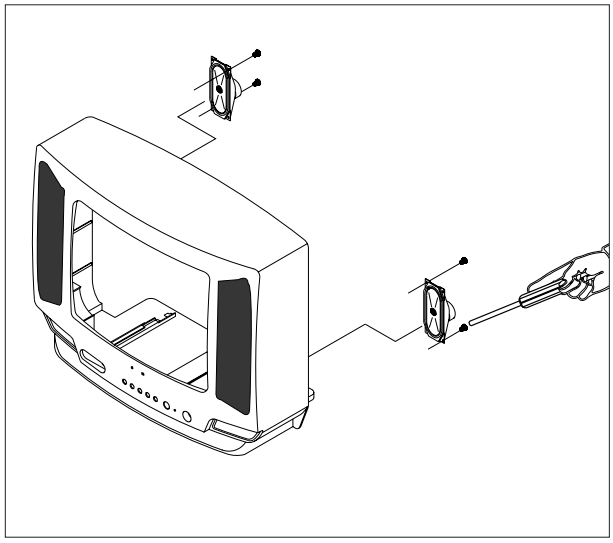
1. After removing the 9 screws, pull the cabinet backwards.



3-2 Speaker Removal

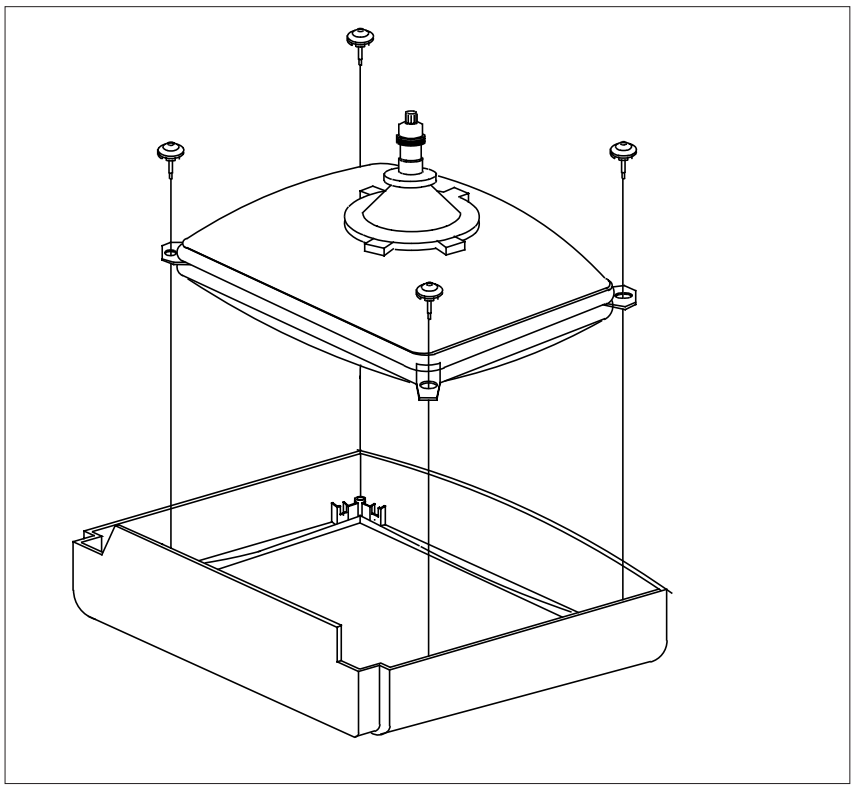






1. Loosen the 4 screws and remove the holder - speakers.

3-3 CRT Removal



1. Spread a soft mat on the floor. Place the TV set face down.
2. Remove the 4 screws mounting the CRT to the front cabinet.
3. Lift the CRT.

MEMO

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.

2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.

3. Do not tamper with the "Adjustment" screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.

2. After IC902 is replaced, warm up the TV for 10 seconds

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence:

   White Balance
   Sub-Brightness
   Vertical Center
   Vertical Size
   Horizontal Size
   Fail Safe (This adjustment must be the last step.)

2. If the EEPROM or CRT is replaced, set PSL and PVA to 15 and 63 (Factory Mode).

4-2 Factory/Service Mode

4-2-1 Procedure for the "Adjustment" Mode

1. This mode uses the standard remote control. The Service Mode is activated (1) by pressing the (Display → (FACTORY) service key or (2) by entering the following remote-control sequence:

   STAND-BY→DISPLAY→ P-STD → MUTE → POWER ON

2. The "SERVICE (FACTORY)" message will be displayed. The Service Mode has four components: Adjustment, Test Pattern, Option Bytes and Reset.

3. Access the Adjustment Mode by pressing the "VOLUME" keys (Up or Down). The adjustment parameters are listed in the accompanying table. Select them by pressing the CHANNEL keys (▲,▼).

4. Selection sequences for the PAL system:

   DOWN or UP key:

   VCO>SBT>SCT>SCR>SC>RG>CDL>STT>LCO>LA>PSL>PVS>PVA>PHS>PEW>PEP>PEC>PET>LSC>TSC>SA>NSL>NVS>NVA>NHS>NEW>NEP>NEC>NET

5. Selection sequences for the NTSC system:

   DOWN or UP key:
   NVS>NVA>NSL>NHS>NEW>NEP>NEC>NET

6. The VOLUME keys increase or decrease the adjustment values, (stored in the non-volatile memory when Adjustment Mode is cancelled).

7. Cancel the Adjustment Mode by re-pressing the "Factory" or "Power on" keys.

4-2-2 Main Adjustment Parameter

Table 4-1 Main Adjustment Parameter (Zilog μ-com)				
FUNCTION	OSD ABBREVIATION	RANGE	ADJUSTMENT DATA	INITIAL
AUTO GAIN CONTROL	AGC	0 ~ 63 STEP	15	15
VOLTAGE CONTROLLED OSCILLATOR	VCO	0 ~ 127 STEP	60 ~ 75	63
SUB BRIGHT	SBT	0 ~ 23 STEP	6 ~ 10	7
SUB CONTRAST	SCT	0 ~ 23 STEP	7	7
SUB COLOR	SCR	0 ~ 23 STEP	15 FIXED	15
S-CORRECTION	SC	0 ~ 63 STEP	11 FIXED	11
RED DRIVE (GAIN)	RG	0 ~ 7 STEP	25 ~ 45	31
BLUE DRIVE (GAIN)	BG	0 ~ 127 STEP	25 ~ 45	31
CATHODE DRIVE LEVEL	CDL	0 ~ 9 STEP	-	4
SUB TINT	STT	0 ~ 63 STEP	0 ~ 10	5
SECAM-L CONTROLLED OSCILLATOR	LCO	0 ~ 63 STEP	63 FIXED	63
SOUND LEVEL ADJUSTMENT	LA	0 ~ 63 STEP	5	5
PAL VERTICAL SLOPE	PSL	0 ~ 63 STEP	20 ~ 25	25
PAL VERTICAL SHIFT	PVS	0 ~ 63 STEP	25 ~ 35	31
PAL VERTICAL AMPLITUDE	PVA	0 ~ 63 STEP	35	31
PAL HORIZONTAL SHIFT	PHS	0 ~ 63 STEP	35 ~ 45	40
PAL EW-WIDTH	PEW	0 ~ 63 STEP	35 ~ 45	38
PAL EW-PARABOLA	PEP	0 ~ 63 STEP	0 ~ 10	22
PAL EW CORNER PARABOLA	PEC	0 ~ 63 STEP	15 ~ 30	22
PAL EW-TRAPEZIUM	PET	0 ~ 63 STEP	15 ~30	30
VERTICAL SCROLL	VSC	0 ~ 63 STEP	31 FIXED	25
TTX SUB CONTRAST	TSC	0 ~ 63 STEP	10 ~ 30	15
SEPARATION ADJUSTMENT	SA	0 ~ 49 STEP	25	25
NTSC VERTICAL SLOPE	NSL	0 ~ 63 STEP	25 FIXED	25

Table 4-1 Main Adjustment Parameter (Zilog μ-com)(Continued)				
FUNCTION	OSD ABBREVIATION	RANGE	ADJUSTMENT DATA	INITIAL
NTSC VERTICAL SHIFT	NVS	0 ~ 63 STEP	35 ~ 45	44
NTSC VERTICAL AMPLITUDE	NVA	0 ~ 63 STEP	25 ~ 35	28
NTSC HORIZONTAL SHIFT	NHS	0 ~ 63 STEP	35 ~ 50	45
NTSC EW-WIDTH	NEW	0 ~ 127 STEP	35 ~ 45	37
NTSC EW PARABOLA	NEP	0 ~ 63 STEP	15 ~ 30	21
NTSC EW-CORNER PARABOLA	NEC			20
NTSC EW-TRAPEZIUM	NET			30

NOTE : PVS,PVA, PHS, NVS, NVA,NHS parameters must be aligned using both the 50Hz and 60Hz vertical-field rates.

4-2-3 Test Pattern

1. This mode can be used during servicing, or for confirming that the convergence and purity adjustments are correct.

2. Access the Test Pattern parameters by pressing a CHANNEL keys (▲,▼) while the Service Mode is on. The cursor will move to the test pattern. Press the VOLUME keys. On-screen display:

   ■ RED
   ■ GREEN
   ■ BLUE

3. AGING Mode (Reference Only)

   This pattern is used for pre-heating the CRT during manufacturing--it is accessed in the factory by twice pressing the "HIDDEN" key .

   Even if the TV power is cut off, the Aging Mode is not cancelled, The patterns are displayed at 5 sec intervals. The AGING mode is cancelled by repressing the "HIDDEN" key.

4-2-4 MICOM Option Byte Table

<table>
<tr><th>BYTE</th><th>BIT</th><th>LOW</th><th>HIGH</th><th>REMARK</th></tr>
<tr><td rowspan="10">B
Y
T
E
0</td><td rowspan="2">D7
D6</td><td colspan="3"><table>
<tr><th>D7</th><th>D6</th><th>Middle East / Arab</th><th>South East / Asia</th><th>China</th><th>Western/Eastern</th><th>CIS</th></tr>
<tr><td>0</td><td>0</td><td>English/Arabian</td><td>English/Thai</td><td>English/
Chinese</td><td>English/German/French/
Spanish/Italian/Swedish/Dutch</td><td>-</td></tr>
<tr><td>0</td><td>1</td><td>English/Arabian/French</td><td>English/Vietnamese</td><td>-</td><td>English/Hungarian/Polish/
Rumanian/Czech/Croatian</td><td>English/
Russian</td></tr>
<tr><td>1</td><td>0</td><td>English/French</td><td>English/Malay</td><td>English</td><td>English/French</td><td>-</td></tr>
<tr><td>1</td><td>1</td><td>English Only</td><td>English/Malay/Indonesian</td><td>-</td><td>English</td><td>English</td></tr>
</table></td><td></td></tr>
<tr><td>D5</td><td></td><td>Auto On</td><td>Last Status</td></tr>
<tr><td>D4
D3
D2</td><td colspan="2">SYSTEM</td><td>TABLE 1</td></tr>
<tr><td>D1</td><td>WITH CHILD LOCK</td><td>WITHOUT CHILD LOCK</td><td>FOR MIDDLE EAST</td></tr>
<tr><td>D0</td><td>NO TTX (ATS = ON)</td><td>TTX (ATS=OFF)</td><td></td></tr>
<tr><td rowspan="6">B
Y
T
E
1</td><td>D7</td><td>WITHOUT PIP</td><td>WITH PIP</td><td></td></tr>
<tr><td>D6</td><td>NOISE REDUCTION OFF(ALWAYS)→OSD
NO DISPLAY (TDA8842)</td><td>NOISE REDUCTION ON/OFF
FUNCTION MENU DISPLAY (TDA8844)</td><td></td></tr>
<tr><td>D5</td><td>SCART : CH UP/DOWN FUNCTIONED</td><td>RCA : NOT CH UP/DOWN FUNCTIONED</td><td></td></tr>
<tr><td>D4
D3
D2</td><td colspan="2"><table>
<tr><th>D4</th><th>D3</th><th>D2</th><th>TV</th><th>AV</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>PLUS→NORMAL</td><td>PLUS→NORMAL</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>PLUS→NORMAL→ZOOM→16:9</td><td>PLUS→NORMAL→ZOOM</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>NORMAL→ZOOM→16:9</td><td>NORMAL→ZOOM→16:9</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>NORMAL→ZOOM→16:9</td><td>NORMAL→ZOOM</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>NORMAL→ZOOM</td><td>NORMAL→ZOOM</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>PLUS→NORMAL→ZOOM</td><td>PLUS→NORMAL→ZOOM</td></tr>
</table></td><td>■ NORMAL MODE E/W
DATA=PLUS + 9
■ PLUS MODE PHS DATA=
PLUS - 1 (PAL/NT)</td></tr>
<tr><td>D1
D0</td><td colspan="2"><table>
<tr><th>D1</th><th>D0</th><th>SYSTEM</th><th>REMARK</th></tr>
<tr><td>0</td><td>0</td><td>B/G</td><td rowspan="4">"MEMORY" BY
PROGRAM
CHANNELS
REQUIRED</td></tr>
<tr><td>0</td><td>1</td><td>D/K</td></tr>
<tr><td>1</td><td>0</td><td>I</td></tr>
<tr><td>1</td><td>1</td><td>B/G & D/K & M</td></tr>
</table></td><td>1) SOUND SYSTEM DURING THE AUTO SEARCH
2) SOUND SYSTEM DURING THE FACTORY MODE RESET
3) MANUAL SEARCH (SYSTEM DOES NOT MATTER)</td></tr>
<tr><td>OTHER</td><td colspan="3">1) HIGH FOR XA/XB (ALWAYS) : CRYSTAL 3.58MHz/4.43MHz CONSTANT
2) AUDIO MUTE DURING NO SIGNAL (ALWAYS) 3) SET THE CONTRAST TO 90 IN THE STANDARD PICTURE</td></tr>
</table>

4-2-4 MICOM Option Byte Table

<table>
<tr><th>BYTE</th><th>BIT</th><th colspan="2">LOW</th><th colspan="2">HIGH</th><th>REMARK</th></tr>
<tr><td rowspan="9">B
Y
T
E
0</td><td rowspan="2">D7</td><td colspan="3" rowspan="2"><table>
<tr><th>D7</th><th>D6</th><th>SYSTEM</th><th>IC</th><th>A/V</th></tr>
<tr><td>0</td><td>0</td><td>STEREO + NICAM</td><td>TDA9859 /TDA9874</td><td rowspan="3">SCART
+ FRONT RCA</td></tr>
<tr><td>0</td><td>1</td><td>STEREO</td><td>TDA9859 / TDA9840</td></tr>
<tr><td rowspan="2">D6</td><td>1</td><td>0</td><td>LINE STEREO</td><td>TDA9859</td><td rowspan="2"></td></tr>
<tr><td>1</td><td>1</td><td>MONO</td><td>TDA8844</td><td>1 SCART/RCA</td></tr>
</table></td><td></td></tr>
<tr><td>D5</td><td colspan="2">WITHOUT TDA9178</td><td colspan="2">WITH TDA9178</td><td>FOR EUROPE CIS</td></tr>
<tr><td>D4</td><td colspan="2">-</td><td colspan="2">NICAM ERROR CHECK BIT</td><td></td></tr>
<tr><td>D3</td><td colspan="2">AFT-ON</td><td colspan="2">AFT - OFF</td><td>INDIA ONLY</td></tr>
<tr><td>D2</td><td colspan="2">TDA8375</td><td colspan="2">TDA8844</td><td></td></tr>
<tr><td>D1</td><td colspan="2">RF AUDIO OUT MUTE OFF</td><td colspan="2">RF AUDIO OUT MUTE ON</td><td></td></tr>
<tr><td>D0</td><td colspan="2">D/K STEREO F = 6.752</td><td colspan="2">D/K STEREO F = 6.25'</td><td></td></tr>
<tr><td>D0</td><td colspan="2">CLOCK DISPLAY OFF</td><td colspan="2">CLOCK DISPLAY ON</td><td>SZM-199EV ONLY</td></tr>
</table>

4-2-5 TABLE 1 (SYSTEM)

BYTE 0			SYSTEM	SOUND SYSTEM		SOUND SYSTEM			
D4	D3	D2		OSD	SYSTEM	RF MODE		AV1/ AV2 MODE	
						OSD	SYSTEM	OSD	SYSTEM
1	1	1	CI	X	I	X	PAL	X	AUTO
1	1	0	CII	X	I	X	PAL	X	AUTO
1	0	1	CW	B/G→I→D/K→		AUTO→PAL→SECAM→NT4.43→		AUTO→PAL→SECAM→NT4.43→NT3.58	
1	0	0	CF	X	B/G, L/L'	X	PAL/SECAM	X	AUTO
0	1	1	CK/CX	B/G→D/K		AUTO→PAL→SECAM→NT4.43→		AUTO→PAL→SECAM→NT4.43→	
0	1	0	CB	X	B/G	X	PAL	X	AUTO
0	0	1	CS 1	B/G→I→D/K→M		AUTO→PAL→NT4.43→NT3.58→		AUTO→PAL→NT4.43→NT3.58→	
0	0	0	CS 2	B/G→I→D/K→M		AUTO→PAL→SECAM→NT4.43→NT3.58		AUTO→PAL→SECAM→NT4.43→NT3.58	

4-2-6 RESET

The Reset Mode is used during factory inspection.
Function Reset:

1. Channels — Add/Erase
2. Sort — Non
3. Language — Basic (English)
4. System — Auto (Non-TTX micom only)

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B^+ power supply must be set to +130/155 volts. (Full color bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. The high voltage should not exceed 30KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 30KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Screen Adjustment

1. Connect CRT socket pin RK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the P mode key (on the remote control) for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage (See Fig.4-1.) on the oscilloscope becomes 130 ± 2.5V.

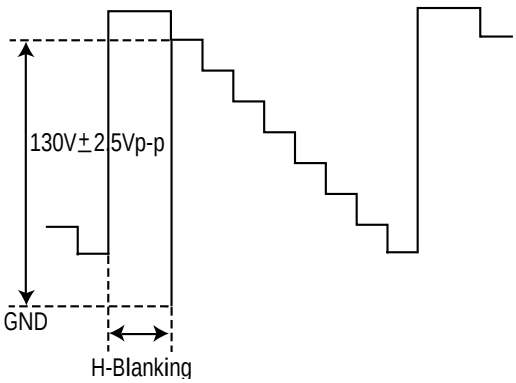


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-1.
4. Input a black and white signal.
5. Fully demagnetize the receive by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-2).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

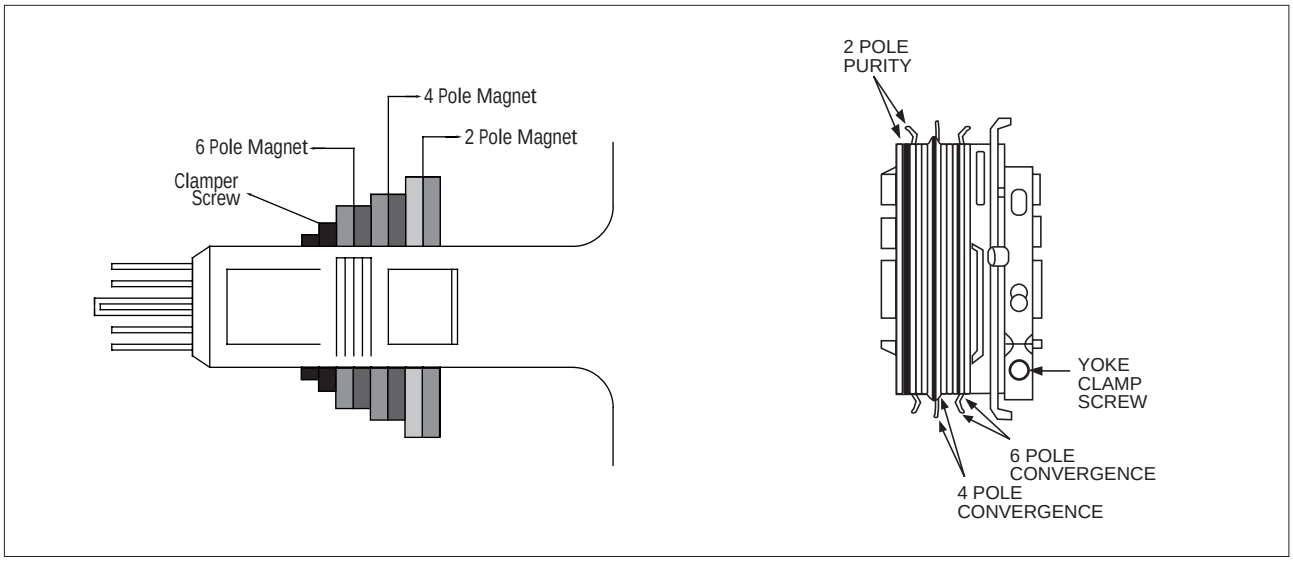


Fig. 4-2 Convergence Magnet Assembly

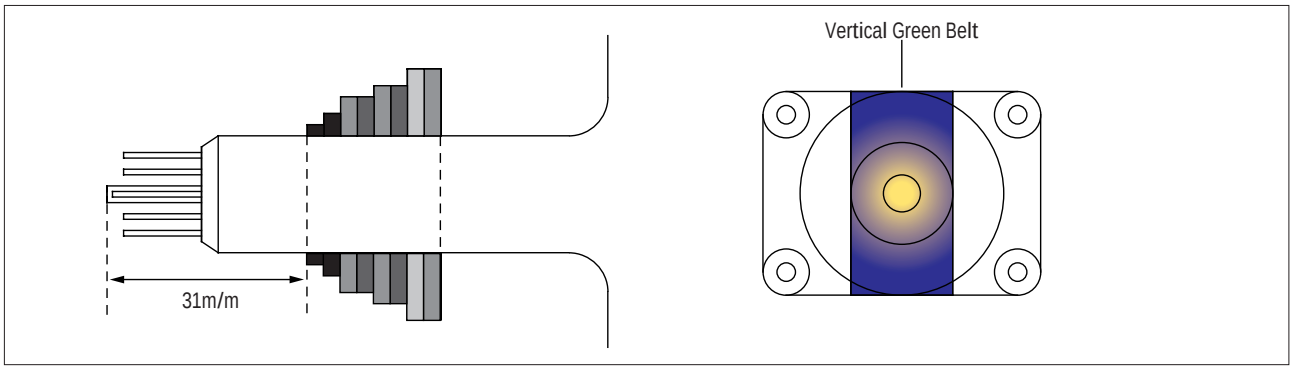


Fig. 4-3 Center Convergence Adjustment

4-3-7 White Balance Adjustment

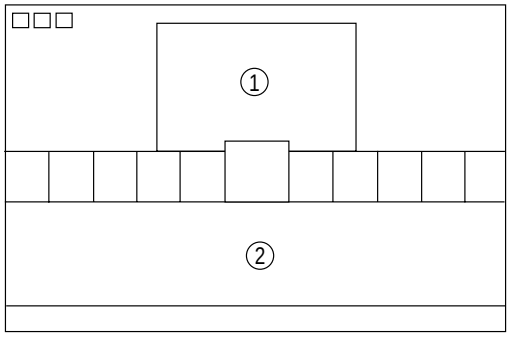


Fig. 4-4

(a) Set up

1. Warm up the TV for at least 30 minutes in the Aging Mode(Test Pattern). This mode is displayed by entering the following sequence:

   DISPLAY→FACTORY (Select Test Pattern)

2. Input a Toshiba pattern.

(b) High-Light Adjustment

1. Set SCT to 50 fL in the Factory Service Mode using CA100. (See Fig. 4-4 ❶)

(c) Low-Light Adjustment

1. Set SBT to 1.2 fL in the Factory Service Mode using CA100. (See Fig. 4-4 ❷)

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the Brightness and Contrast controls for a well defined picture.
3. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
4. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.
5. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)
6. Repeat adjustments 2~6, if necessary.
7. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-3).

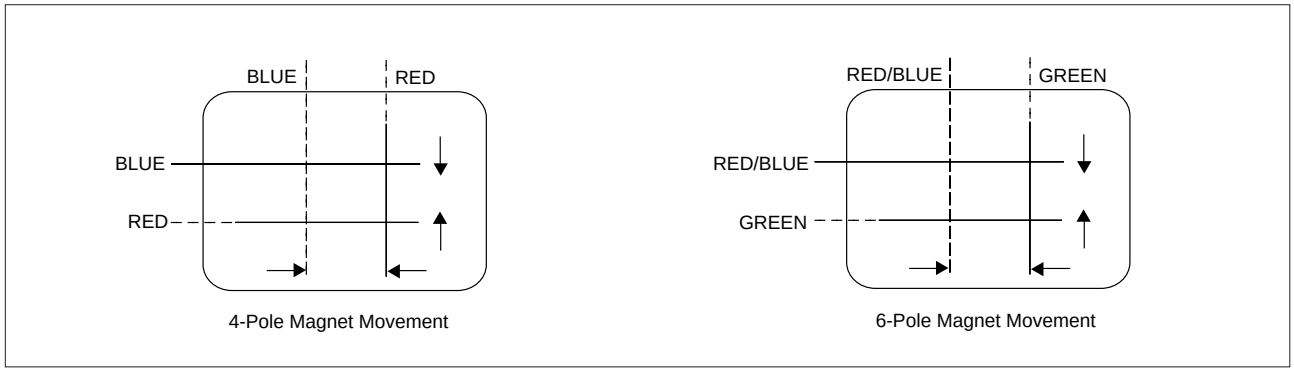


Fig . 4-5 Center Convergence Adjustment

4-3-9 VCO Adjustment

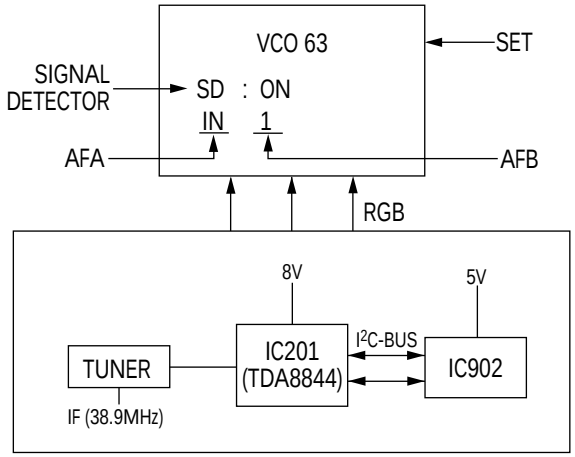


Fig. 4-6

1. Turn on the TV.
2. Set IF port of a tuner to 38.9MHz. (Use a pattern generator).
3. Input a color bar pattern(PAL-B/G system).
4. In the Factory Service Mode, select "Adjustment → VCO" and set VCO data to 63.
5. Ensure "SD On" (Signal Input) and "SD Off" (No Signal).
6. Adjust T201 (connected to TDA8844 pins3,4) so that AFA Bit is "INSIDE WINDOW" (the AFB Bit is 1).

4-3-10 RF AGC Adjustment

1. Connect a pattern generator (PM5418) RF signal to tuner RF.

2. Select a gray scale pattern and PAL-B/G system.
   Set to 479.25MHz.

3. Connect IC201 (ONECHIP) pin 53 to a digital multimeter.

4. Adjust AGC (using volume keys) in the Factory Service Mode.
   Set IC201 (ONECHIP) pin 54 to 3.7 $\pm$ 0.05v(DC).

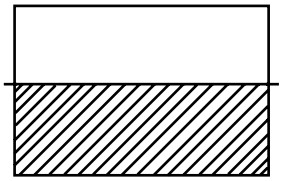
5. Adjust AGC within 20 seconds after power ON.

4-3-11 Geometry Adjustment (SC -> PVS -> PVA ->PSL -> PHS)

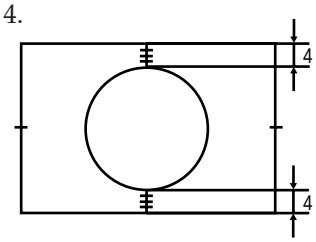
1. Input a Lion Head pattern.

2. SET the SC Data steps 10~12 in the Factory Mode.

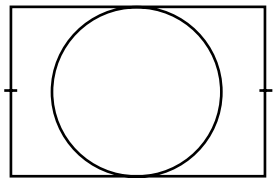
3. Adjust with PVS (starts blinking) exactly at middle of the screen.



4. Adjustment with PVA : Top and Bottom margins of the picture are 4.



5. Adjustment with PSL : Bottom of picture to bottom of screen.

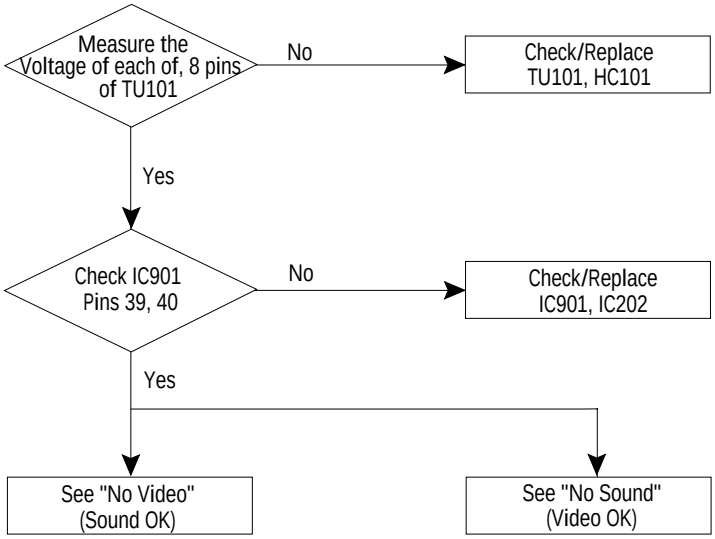


6. Adjust PHS horizontally. Center the picture.

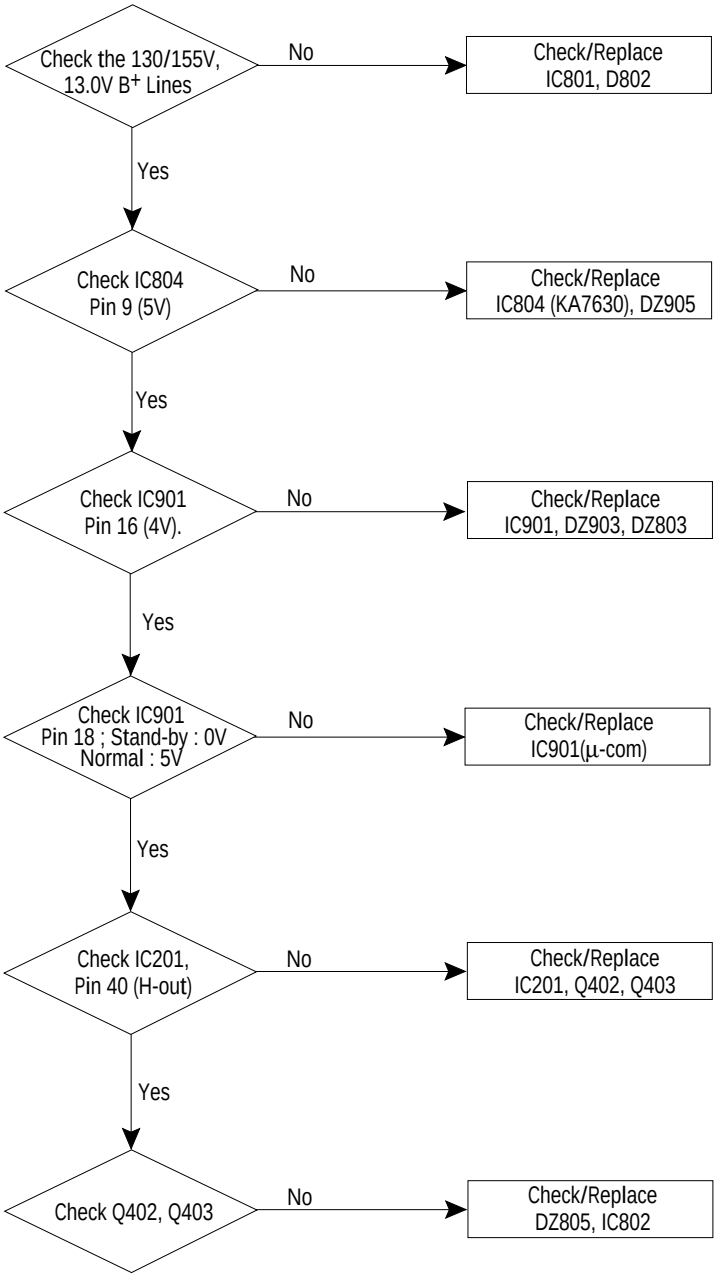
MEMO

5. Troubleshooting

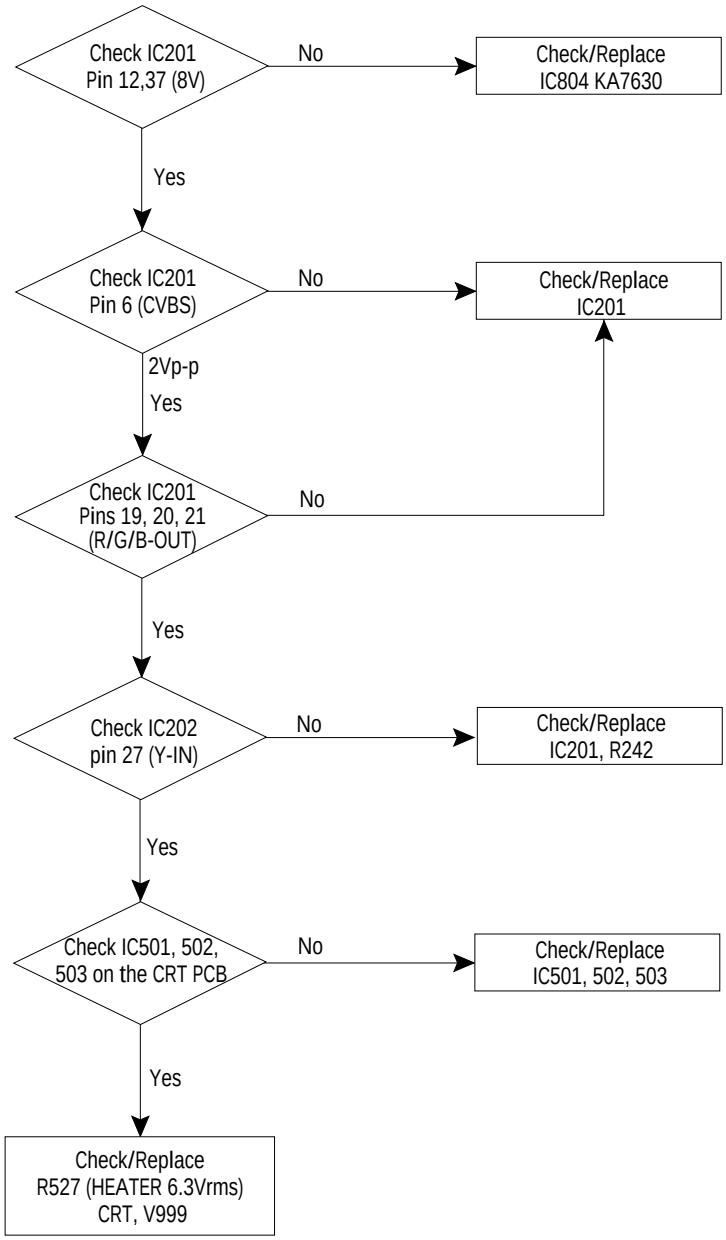
5-1 No Video (Raster On, No Sound)



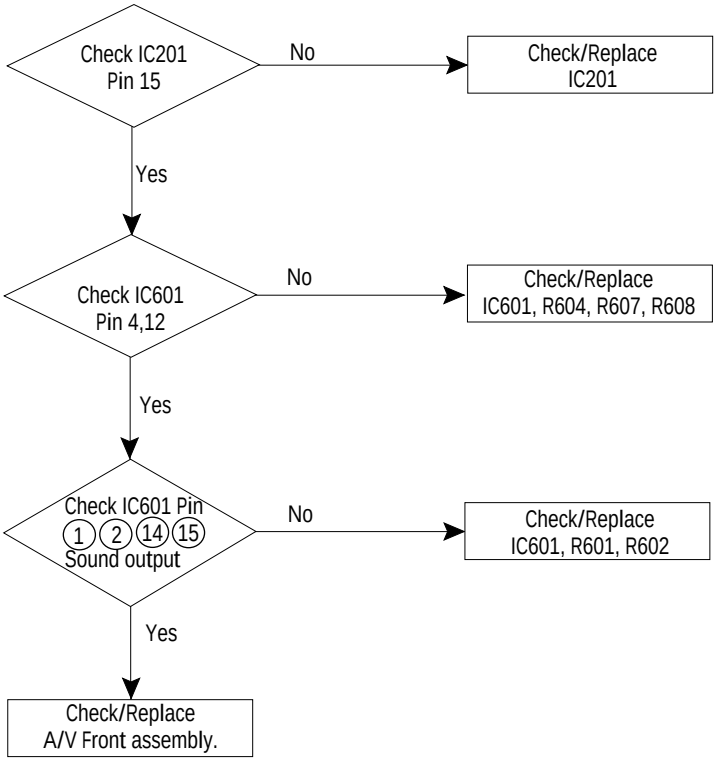
5-2 No Power


Check the 130/155V, 13.0V B+ Lines
No
Check/Replace IC801, D802
Yes
Check IC804 Pin 9 (5V)
No
Check/Replace IC804 (KA7630), DZ905
Yes
Check IC901 Pin 16 (4V).
No
Check/Replace IC901, DZ903, DZ803
Yes
Check IC901 Pin 18 ; Stand-by : 0V Normal : 5V
No
Check/Replace IC901(μ-com)
Yes
Check IC201, Pin 40 (H-out)
No
Check/Replace IC201, Q402, Q403
Yes
Check Q402, Q403
No
Check/Replace DZ805, IC802

5-3 No Video (Sound OK)

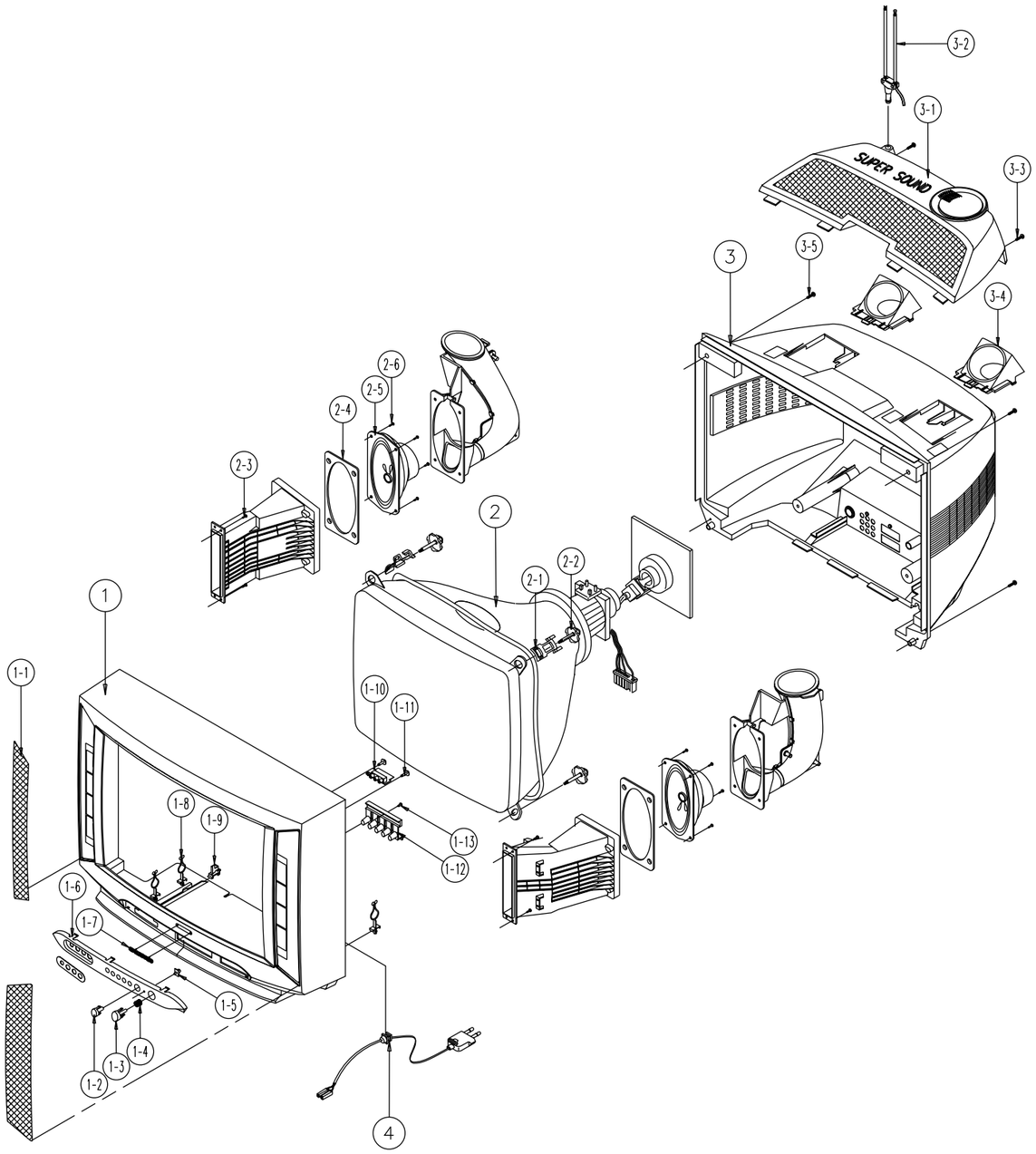


5-4 No Sound (Video OK)



6. Exploded View & Parts List

6-1 CK569BGT1X/BWT(VWT)



No	Code No	Description	Specification	Q'ty	Remark
1	AA91-10336J	ASSY-CABINET,FRONT	-,CK569BGTR,BK708P BWT,HB,BLK	1	
	AA64-31129E	CABINET-FRONT	-,569B,BK708P BWT,HIPS,HB,BLK,	1	
1-1	AA63-50336A	GRILLE-WOOFER,L	-,569B,-,SECC,T0.5,BLK,-	1	
	AA63-50337A	GRILLE-WOOFER,R	-,569B,-,SECC,T0.5,BLK,-	1	
1-2	AA64-40431A	WINDOW-REMOCON	-,503E,-,ABS,HB,LG41338,-	1	
1-3	AA64-10716A	KNOB-POWER	-,566B,-,ABS,HB,MET BROWN	1	
1-4	AA61-60003T	SPRING-CS	-,SUS304,0.5,OD7,H13.5,N5,-,-,	1	
1-5	AA64-40432A	INDICATOR-LED	-,503E,-,PMMA,HB,CLR,-	1	
1-6	AA64-40466L	DECORATION-FRONT	-,CK569BGTR,KSP213 ML,HIPS,V0,	1	
1-7	AA64-70010B	BADGE-BRAND	AL,SS R2000 25,SILVER,L50,-,-,	1	
1-8	AA65-30105A	CLAMP-WIRE	NYLON 66,V2,NTR,15MM,ALL MODEL	2	
1-9	AA61-40053A	STOPPER-PCB	ALL MODEL,HIPS HB,WHT,HB,-,-	1	
1-10	AA95-40004M	ASSY-PCB,A/V	-,CS5377/MVTX,SCT12A,-,-,-	1	
1-11	AA60-10002A	SCREW-TAPPING	RH,+,M4,L12,ZPC(YEL),-,OD14	2	
1-12	AA64-10717A	KNOB-CONTROL	-,-,-,ABS,HB,MET BROWN	1	
1-13	6002-000514	SCREW-TAPPING	RH,+,2,M4,L15,ZPC(BLK),SWR	1	
2	AA03-10026K	CRT-COLOR	-,A53QCA891X(B),+380mG,21,90d	1	
2-1	AA65-30019A	CLAMP-D,COIL	NYLON-66,V0,NTR,DADH-460 20,-	4	
2-2	3704-000110	SOCKET-CRT	14P,29.1,25.5,SN,ISHS09S/BK	4	
2-3		ASSY-HOLDER,SPK OPTION			
2-4		ASSY-HOLDER,SPK OPTION			
2-5	AA91-60207A	ASSY-HOLDER,SPK	-,M-PP,HB,BLK/HORN,168mm,8R15W	1	
2-6	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	8	
3	AA64-31131C	CABINET-BACK	-,569B,-,HIPS,V2,BLK,-,-	1	
3-1	AA63-30214A	COVER-TOP,SPK	-,569B,PK708P,HIPS,HB,BLK,-,-	1	
3-2	AA42-10001V	ANT-ROD	-,3S,620mm,BRN,UL/CSA	1	
3-3	AA60-10050T	SCREW-TAPPING	RH,+,2S,M4,L20,ZPC(BLK),SWRCH1	2	
3-4		ASSY-HOLDER,SPK OPTION			
3-5	AA60-10050T	SCREW-TAPPING	RH,+,2S,M4,L20,ZPC(BLK),SWRCH1	4	
4	AA61-20284A	HOLDER	-,P-CORD,PP,VO,BLK,KE-002	1	

7. Electric Parts List

7-1 CK569BGT1X/BWT (VWT)

Loc. No.	Code No.	Description ; Specification	Remark
		ASSY-PCB,MAIN(OPT)	
		BUYER : CIS (RUSSIA)	
*	AA94-10132X	ASSY-PCB,MAIN(OPT);CK569BGT1X/BWT,SCT57B,RUSSIA,-	
	AA94-10134D	ASSY-PCB,MAIN(OPT);CK569BGT1X/VWT,SCT57B,N-RUSIA	
C101	2401-000758	C-AL;220nF,20%,50V,GP,TP,5x11mm,5mm	
C102	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11.5,5mm	
C103	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C104	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C105	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C106	2401-001082	C-AL;330nF,20%,50V,GP,TP,5x11mm,5mm	
C107	2401-000914	C-AL;22uF,20%,16V,-,TP,5x11,5mm	
C108	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C109	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V,TP,-,7.5	
C209	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C210	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C211	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C213	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5m	
C214	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
C215	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C216	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C217	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C218	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C219	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C220	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C221	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C222	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C223	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C224	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C225	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C226	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
C227	2201-000986	C-CERAMIC,DISC;12pF,5%,50V,NPO,TP,5x3mm,2.5mm	
C228	2201-000257	C-CERAMIC,DISC;16pF,5%,50V,CH,TP,5x3,5	
C229	2301-000285	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm	
C230	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C231	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-	
C232	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C233	2309-000138	C-FILM,PE-PPF;100nF,5%,50V,TP,20x16x8.5,7.5m	
C234	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C235	2202-000162	C-CERAMIC,MLC-AXIAL;15pF,5%,50V,SL,TP,3.5x19,-	
C236	2202-000253	C-CERAMIC,MLC-AXIAL;4.7nF,20%,16V,Y5R,TP,1.9x3.5,7	
C237	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C238	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
C239	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C240	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C241	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C242	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-	
C243	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C244	2202-000199	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V,TP,-,7.5	
C245	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C246	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C255	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C256	2202-000830	C-CERAMIC,MLC-AXIAL;82pF,10%,50V,Y5P,TP,3.5x19,-	
C301	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm	
C302	2401-003028	C-AL;100uF,20%,25V,WT,TP,6.3x11,5mm	
C303	2401-001661	C-AL;68uF,20%,100V,GP,TP,10x16mm,5m	
C304	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C305	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C306	2301-000188	C-FILM,PEF;1nF,5%,100V,TP,10.5x12.5x6.5,5	
C402	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
C403	2401-000901	C-AL;22uF,20%,160V,GP,TP,10x20mm,5m	
C404	2201-000291	C-CERAMIC,DISC;1nF,10%,500V,Y5P,TP,8.5x5MM,5	
C405	2401-002268	C-AL;2.2uF,20%,250V,LZ,TP,8X11,5	
C406	2306-000187	C-FILM,MPPF;330nF,5%,400V,BK,26x20.5x13.5,	
C407	2201-000984	C-CERAMIC,DISC;680pF,10%,2KV,Y5P,TP,11x6,7.5m	
C408	2305-000382	C-FILM,MPEF;4.7nF,5%,400V,TP,-,5mm	
C409	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C410	2401-001661	C-AL;68uF,20%,100V,GP,TP,10x16mm,5m	
C411	2305-000178	C-FILM,MPEF;10nF,5%,100V,TP,-,5mm	
C412	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C413	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C415	2306-000326	C-FILM,MPPF;4.7nF,5%,1.6KV,TP,28.5x16x9mm,	
C416	2303-001004	C-FILM,PPF;15nF,5%,400V,TP,20x6.5x13,7.5m	
C418	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C419	2401-001397	C-AL;470uF,20%,25V,GP,TP,10x16mm,5m	
C420	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C421	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C422	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C423	2201-000556	C-CERAMIC,DISC;470pF,10%,500V,Y5P,TP,7x4,5	
C424	2401-002278	C-AL;22uF,20%,250V,WT,TP,13x21,5	
C425	2305-000154	C-FILM,MPEF;100nF,5%,400V,TP,21.5x6.5x11.5	
C426	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C427	2201-000406	C-CERAMIC,DISC;270pF,10%,2KV,Y5P,TP,8x6,7.5	
C502	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C503	2201-000969	C-CERAMIC,DISC;10nF,+80-20%,3KV,Y5V,TP,-,10mm	
C504	2401-001232	C-AL;4.7uF,20%,250V,GP,TP,10x12.5mm	
C506	2401-000430	C-AL;10uF,20%,250V,GP,TP,10x16mm,5m	
C507	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C508	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C509	2202-000862	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP,3.5x1.9,-	
C601	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
C602	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C603	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
C604	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C605	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
C606	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C607	2401-001998	C-AL;1000uF,20%,25V,GP,TP,10x20,5mm	
C705	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C707	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C709	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C710	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C712	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C713	2301-000247	C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C714	2301-000289	C-FILM,PEF;5.6nF,5%,50V,TP,7x6x3,5	
C717	2301-000289	C-FILM,PEF;5.6nF,5%,50V,TP,7x6x3,5	
C718	2301-000247	C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C719	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C721	2301-000175	C-FILM,PEF;15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C722	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C723	2301-000175	C-FILM,PEF;15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C725	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C727	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C728	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C801	2306-000112	C-FILM,MPPF;100nF,20%,250V,BK,-,15mm	
C804	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C805	2201-000315	C-CERAMIC,DISC;2.2nF,+80-20%,250VAC,Y5U,TP,9x	
C806	2401-003030	C-AL;220uF,20%,450V,GP,BK,30x35mm,1	
C807	2303-000163	C-FILM,PPF;2.2nF,5%,800V,TP,15x13x8.5,7.5	
C808	2401-002284	C-AL;33uF,20%,50V,GP,TP,5x11mm,5mm	
C809	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm,5m	
C811	2201-000144	C-CERAMIC,DISC;100pF,5%,50V,CH,TP,8x3,5	
C812	2201-000954	C-CERAMIC,DISC;4.7nF,20%,400V,Y5U,BK,7x16,10m	
C813	2201-000954	C-CERAMIC,DISC;4.7nF,20%,400V,Y5U,BK,7x16,10m	
C814	2201-000991	C-CERAMIC,DISC;560pF,10%,2KV,Y5P,TP,13x7,7.5	
C815	2401-003058	C-AL;100uF,20%,200V,WT,TP,16x25mm,7	
C816	2401-000293	C-AL;100uF,+30-10%,200V,HR,TP,16x25	
C817	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C818	2401-000706	C-AL;2200uF,20%,25V,GP,TP,16x25mm,7	

Loc. No.	Code No.	Description ; Specification	Remark
C819	2201-000599	C-CERAMIC,DISC;560pF,10%,500V,Y5P,TP,7x4,5	
C820	2401-003047	C-AL;2200uF,20%,25V,WT,TP,16x25,7.5	
C821	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C823	2401-000302	C-AL;100uF,20%,25V,GP,TP,6.3x11,5mm	
C824	2305-000288	C-FILM,MPEF;220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C825	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C826	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C827	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C828	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11.5,5mm	
C829	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C830	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
C831	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C832	2401-000287	C-AL;100uF,20%,16V,WT,TP,6x11mm,5mm	
C833	2401-000287	C-AL;100uF,20%,16V,WT,TP,6x11mm,5mm	
C901	2201-000234	C-CERAMIC,DISC;150pF,5%,50V,CH,TP,9.5x3,5	
C902	2301-000108	C-FILM,PEF;1.5nF,5%,50V,TP,6.5x3.0x5.5mm,	
C903	2201-000119	C-CERAMIC,DISC;100nF,+80-20%,50V,Y5V,TP,8x3.5	
C904	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C905	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C906	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5,5	
C907	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C908	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C909	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C910	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C911	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C912	2401-001333	C-AL;470nF,20%,50V,GP,TP,5x11,5	
C913	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5,	
C914	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
C915	2401-001537	C-AL;47uF,20%,25V,GP,TP,6.3x7mm,5mm	
C916	2201-000193	C-CERAMIC,DISC;10pF,0.3pF,50V,CH,TP,5x3,5	
C917	2201-000573	C-CERAMIC,DISC;47pF,5%,50V,CH,TP,6.5x3.0,5	
C918	2301-000192	C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm	
C919	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C920	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C921	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-	
C922	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
C923	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C924	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
C925	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C926	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
C927	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5P,TP,2.2x3.	
CN501	AA39-20570A	LEAD CONNECTOR-ASSY;-,YBNH025-08,TIE,8PxB5/B3,500m	
CN602	3711-002644	CONNECTOR-HEADER;BOX,5P,1R,2.5mm,STRAIGHT,SN	
CN701	3711-002647	CONNECTOR-HEADER;BOX,8P,1R,2.5mm,STRAIGHT,SN	
CN802	AA27-20003T	COIL-DEGAUSSING;-,22,16.7ohm,60T,2600mm,E	
CN904	3711-002644	CONNECTOR-HEADER;BOX,5P,1R,2.5mm,STRAIGHT,SN	
CW701	2503-000158	C-NETWORK;330pFx4,20%,50V,MCCB1H331MX4YT	
CW901	2503-000156	C-NETWORK;100pFx4,20%,50V	
D205	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D217	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D401	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D402	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
D403	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
D404	0402-001012	DIODE-RECTIFIER;FMP-3FU,1500V,5A,TO-3PF	
D405	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D406	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41	
D407	0402-000216	DIODE-RECTIFIER;ERC24-06,600V,1.0A,DO-204	
D408	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D501	0402-000216	DIODE-RECTIFIER;ERC24-06,600V,1.0A,DO-204	
D502	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D503	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D504	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D601	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D602	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D701	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D801	0402-001160	DIODE-BRIDGE;D5SB60,600V,2.8A,SIP-4,ST	
D802	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,1.0A,DO-41	
D803	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,TP	
D804	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D805	0402-000231	DIODE-RECTIFIER;FMG-G26S,600V,4A,TO-220F,ST	
D806	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L,TP	
D807	0402-000233	DIODE-RECTIFIER;FML-G12S,200V,5A,-	
D809	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D810	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D901	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D902	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D903	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D904	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D905	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D906	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
D907	0401-000005	DIODE-SWITCHING;1N4148,75V,300mA,DO-35,TP	
DV801	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP	
DV802	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP	
DZ101	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ201	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ204	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ205	0403-000551	DIODE-ZENER;MTZ3.9B,3.9V,3.89-4.16V,500mW,	
DZ301	0403-000660	DIODE-ZENER;MTZ22A,22V,20.15-21.2V,500mW,D	
DZ302	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,TP	
DZ303	0403-000538	DIODE-ZENER;MTZ16C,15.69-16.51V,500mW,DO-3	
DZ304	0403-001039	DIODE-ZENER;MA2560,56V,52-60V,1W,DO-41,TP	
DZ401	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,TP	
DZ402	0403-000295	DIODE-ZENER;MTZ5.1B,5.1V,4.94-5.20V,500mW,	
DZ420	0403-000294	DIODE-ZENER;MTZ4.7B,4.55-4.80V,500mW,DO-34	
DZ501	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ502	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ503	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ504	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ601	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ602	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ603	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ604	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500mW,	
DZ605	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ701	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ702	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ703	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ704	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ705	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ803	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ805	1203-001217	IC-POSI.ADJUST REG.;431,TO-92,3P,4.58MIL,PLASTIC,2	
DZ807	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
DZ901	1203-000451	IC-VOLTAGE REGULATOR;33,TO-92,3P,-,PLASTIC,31/35V,2	
DZ902	0403-000295	DIODE-ZENER;MTZ5.1B,5.1V,4.94-5.20V,500mW,	
DZ903	0403-000559	DIODE-ZENER;MTZ6.2C,6.2V,6.12-6.44V,500mW,	
DZ904	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500mW,	
DZ905	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,	
⚠ F801	3601-000281	FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5x20mm	
F801A	3602-000114	FUSE-HOLDER;-,-,30mohm	
F801B	3602-000114	FUSE-HOLDER;-,-,30mohm	
⚠ F802	3601-001086	FUSE-FERRULE;125V,5A,QUICK-ACTING,CERAMIC,2	
HC101	AA13-20004A	IC-HYBRID;-,PAP102T,SIP,6P,PRE-AMP,TP	
⚠ IC201	1204-001145	IC-DEMODULATOR;TDA8844,DIP,56P,-,PLASTIC,8.8V	
⚠ IC301	1204-000426	IC-VERTICAL PROCESSO;TDA8350Q/N4,SIP,13P,-,PLASTIC,	
⚠ IC401	1203-000243	IC-POSI.FIXED REG.;7812A,TO-220,3P,-,PLASTIC,11.5	
⚠ IC501	1201-001159	IC-VIDEO AMP;6107,ZIP,9P,300MIL,SINGLE,-,PL	
⚠ IC601	1201-001064	IC-POWER AMP;7297,ZIP,15P,-,DUAL,32dB,PLAST	
⚠ IC701	1204-000473	IC-AUDIO PROCESSOR;TDA9859,DIP,32P,-,PLASTIC,-,-,	
⚠ IC801	1203-001313	IC-PWM CONTROLLER;3S0680,TO-3P,5,150MIL,PLASTIC,	
⚠ IC802	0604-001038	PHOTO-COUPLER;TR,130-260%,200mW,DIP-4,ST	
⚠ IC803	1203-001006	IC-VOLTAGE REGULATOR;78R05,TO-220F,4P,-,PLASTIC,4.8	
⚠ IC804	1203-000644	IC-POSI.FIXED REG.;7630,SIP,10P,-,PLASTIC,5.1/8V,	
⚠ IC901	AA13-30019R	IC-MCU;-,Z8933212PSC-R3719,16BIT,SDIP	
⚠ IC902	1103-000156	IC-EEPROM;24C04,512X8BIT,DIP,8P,300MIL,1	
J415	2001-001037	R-CARBON(S);0.39ohm,5%,1/2W,AA,TP,2.4x6.4m	
JA701	3722-000183	JACK-SCART;21P,4mm,SN,BLK,NO	
L101	2701-001033	INDUCTOR-AXIAL;1uH,10%,5x14mm	
L102	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L103	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L204	2701-000197	INDUCTOR-AXIAL;5.6uH,10%,2.5x3.4mm	
L205	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L206	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L207	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L208	2701-000142	INDUCTOR-AXIAL;1uH,10%,2.5x3.4mm	
L301	2701-000116	INDUCTOR-AXIAL;10uH,10%,4.2x9.8mm	
L302	2701-000116	INDUCTOR-AXIAL;10uH,10%,4.2x9.8mm	
L303	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L304	2701-000178	INDUCTOR-AXIAL;33uH,10%,2.8x7mm	
L401	AA27-40003L	COIL-HORIZ,WIDTH;-,1.0mH,DR14x20,2UEW0.45,ST	
L402	AA27-30003L	COIL-LINERITY;-,73uH,DR12x15,0.55mm,-,BK,15%	
L601	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L603	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L701	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L702	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L703	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	

Loc. No.	Code No.	Description ; Specification	Remark
L704	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L709	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L801	AA29-30001Q	FILTER-LINE;-,20mH,1.26A,-,BSF3050	
L803	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L804	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
L805	AA27-10002Y	COIL-CHOKE;-,100uH,K,10,700mA,T,100UH-K(S	
L806	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L807	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L808	3301-000287	CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,2400G	
L901	2701-000189	INDUCTOR-AXIAL;470nH,10%,2.5x3.4mm	
L903	2701-000197	INDUCTOR-AXIAL;5.6uH,10%,2.5x3.4mm	
L904	2701-000211	INDUCTOR-AXIAL;68uH,10%,2.5x3.4mm	
L905	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
L906	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LD901	AA96-30001B	ASSY-LED,GUIDE;-,AA61-50055A,DL-G5RGA,-	
Q204	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q207	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q210	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q401	0502-000242	TR-POWER;KSA614,PNP,25W,TO-220,TP,40-24	
Q402	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L,-,120-	
Q403	0502-000450	TR-POWER;2SD1887YD,NPN,1500V,800V,10A,7	
Q704	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,TP,120-	
Q901	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q902	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q903	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q904	0504-000123	TR-DIGITAL;KSR1010,NPN,300mW,10K,TO-92,TP	
Q905	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q906	0501-000283	TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,TP,120-	
Q907	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
Q908	0501-000389	TR-SMALL SIGNAL;KSC815,NPN,400mW,TO-92,TP,120-	
R101	2003-001035	R-METAL OXIDE(S);27ohm,0.05,2W,AF,TP,3.9x10mm	
R209	2001-000010	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R212	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R214	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R215	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R218	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R219	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R220	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R221	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R222	2001-000440	R-CARBON;1ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R223	2001-000617	R-CARBON;3.9Mohm,5%,1/8W,AA,TP,1.8x3.2m	
R224	2001-000832	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R225	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R226	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R227	2001-000739	R-CARBON;4.7Mohm,5%,1/8W,AA,TP,1.8x3.2m	
R230	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R233	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R234	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R235	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R239	2001-000009	R-CARBON;20Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R241	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R242	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R244	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R246	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R247	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R248	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R249	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R250	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R251	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R252	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R253	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R255	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R256	2004-001234	R-METAL;75Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R257	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R258	2004-001914	R-METAL;39Kohm,2%,1/8W,AA,TP,1.8x3.5mm	
R259	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R260	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R261	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R262	2004-001995	R-METAL;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R270	2001-000890	R-CARBON;6.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R301	2004-001970	R-METAL(S);1.8Kohm,1%,1/2W,AA,TP,6.5x2.5m	
R302	2004-004087	R-METAL(S);1.5ohm,1%,1/2W,AA,TP,2.5x6.5mm	
R303	2004-004087	R-METAL(S);1.5ohm,1%,1/2W,AA,TP,2.5x6.5mm	
R304	2001-001131	R-CARBON(S);33Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R305	2003-001018	R-METAL OXIDE(S);220ohm,5%,2W,AF,TP,3.9x10mm	
R306	2003-001018	R-METAL OXIDE(S);220ohm,5%,2W,AF,TP,3.9x10mm	
R307	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	

Loc. No.	Code No.	Description ; Specification	Remark
R401	2004-004092	R-METAL;52.6Kohm,1%,1/2W,AA,TP,2.5x6.5	
R402	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R403	2001-001155	R-CARBON(S);5.6Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R405	2001-001138	R-CARBON(S);390ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R406	2003-002008	R-METAL OXIDE(S);18Kohm,5%,2W,AF,TP,3.9x10mm	
R407	2003-000993	R-METAL OXIDE(S);3.9Kohm,5%,1W,AF,TP,2.5x6.5mm	
R408	2008-000179	R-FUSIBLE(S);10ohm,5%,1/2W,AA,TP,2.5x6.5mm	
R409	2008-000264	R-FUSIBLE(S);1ohm,5%,1W,AF,TP,3.9x10mm	
R410	2001-001114	R-CARBON(S);270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R411	2001-001066	R-CARBON(S);110ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R413	2008-000251	R-FUSIBLE(S);0.27ohm,10%,2W,AF,TP,3.9x10mm	
R414	2008-001033	R-FUSIBLE(S);10ohm,5%,2W,AF,TP,3.9x10mm	
R415	2008-000221	R-FUSIBLE;0.47ohm,10%,1/2W,AA,TP,4.7x11m	
R416	2001-000633	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R417	2004-001408	R-METAL(S);91Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
R418	2004-001408	R-METAL(S);91Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
R419	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	
R421	2001-000022	R-CARBON(S);33ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R501H	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R502H	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R503	2002-001008	R-COMPOSITION;1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R504	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R505	2008-001015	R-FUSIBLE(S);1.5ohm,5%,2W,AF,TP,3.9x10mm	
R507	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R508	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R509	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R510	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R511	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R512	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R526	2008-001047	R-FUSIBLE(S);68ohm,5%,2W,AF,TP,3.9x10mm	
R527	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R601	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10mm	
R602	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10mm	
R603	2001-000232	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R604	2001-000947	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R605	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R606	2001-000232	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R607	2001-000947	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R701	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R702	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R703	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R704	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R709	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R710	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R711	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R712	2001-000539	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R713	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R714	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R715	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R717	2001-000539	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R718	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R719	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R726	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R727	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R728	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R729	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R730	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R731	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R733	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R734	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R735	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R736	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R740	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R741	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R803	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R804	2001-001150	R-CARBON(S);470Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R805	2001-001150	R-CARBON(S);470Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R806	2004-001967	R-METAL(S);68Kohm,1%,1/2W,AA,TP,6.5x2.5mm	
R807	2004-001373	R-METAL(S);100Kohm,1%,1/2W,AA,TP,2.4x6.4m	
R808	2002-001011	R-COMPOSITION;3.3Mohm,10%,1/2W,AA,TP,3.7x9mm	
R809	2002-001013	R-COMPOSITION;4.7Mohm,10%,1/2W,AA,TP,3.7x9mm	
R810	2003-001090	R-METAL OXIDE(S);10Kohm,5%,2W,AF,TP,4x12mm	
R811	2003-000784	R-METAL OXIDE(S);7.5Kohm,5%,2W,AF,TP,4x12mm	
R812	2006-000321	R-CEMENT;5.6ohm,5%,7W,CB,BK,9.5x13.5x39	
R813	2001-001050	R-CARBON(S);1.5Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R814	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm	

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R815	2004-001889	R-METAL(S);127Kohm,1%,1/2W,AA,TP,2.5x6.5m	
R816	2004-001983	R-METAL;2.49Kohm,1%,1/2W,AA,TP,2.4x6.4	
R817	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x10mm	
R818	2006-000321	R-CEMENT;5.6ohm,5%,7W,CB,BK,9.5x13.5x39	
R819	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	2008-000266	R-FUSIBLE(S);1ohm,5%,2W,AF,TP,3.9x10mm	
R821	2008-000266	R-FUSIBLE(S);1ohm,5%,2W,AF,TP,3.9x10mm	
R822	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	2003-000005	R-METAL OXIDE(S);1ohm,5%,2W,AA,TP,4x12mm	
R824	2001-001125	R-CARBON(S);300Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R901	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R902	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R903	2001-000066	R-CARBON(S);10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R904	2004-000218	R-METAL;10Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R905	2004-000218	R-METAL;10Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R906	2004-000253	R-METAL;11Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R908	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R909	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R910	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R911	2001-000214	R-CARBON;1.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R912	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R913	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R914	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R916	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R917	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R918	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R919	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R920	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R921	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R922	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R923	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R924	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R925	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R926	2004-001193	R-METAL;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R927	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R928	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R929	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R930	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R931	2001-001114	R-CARBON(S);270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R932	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R933	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R934	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R935	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R936	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R937	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R938	2001-000832	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R939	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R940	2001-001062	R-CARBON(S);10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R942	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R943	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R944	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R945	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R946	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R948	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R949	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R951	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R952	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R953	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R954	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R955	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R956	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM901	AA59-60001U	MODULE-REMOCON;-,ORC-50VF/SR-12V,38KHz,940nm,	
RP801	1404-000187	THERMISTOR-NTC;4.7ohm,15%,2800K,27.2mW/C,TP	
RP803	1404-000180	THERMISTOR-PTC;14ohm,20%,-,290V,25A,-,ST	
SF102	2904-001063	FILTER-SAW AV;38.9MHz,SIP5K,TP,17dB,PAL-B/G,	
SW801	3403-001020	SWITCH-PUSH;250V,5A,DPST,OFF-ON-OFF	
SW901	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW902	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW903	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW904	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
SW905	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SPST	
⚠ T201	AA26-10006E	TRANS-IF;-,7MG,VIF,-,7mm,5pF,79.1MHz,ST	
⚠ T401	AA26-50001B	HORIZ.DRIVE;-,7.1mH,102uH,10-20uH,YL081,ST	
⚠ T444	AA26-30004Y	TRANS-FLYBACK;-,FSV-21B005(S),21,125V	
⚠ T801	AA26-20007F	TRANS-SWITCHING;-,90VAC~260VAC,130/15/15,CE,EE	
⚠ TU101	AA40-10003K	TUNER-V/S;TELE1-002,PAL-B/G,-,105CH BWT	
⚠ TU101	AA40-10003T	TUNER-V/S;TELE4-016,PAL-B/G,BK,181CH VWT	

Loc. No.	Code No.	Description ; Specification	Remark
⚠ V999	3704-000110	SOCKET-CRT;14P,29.1,25.5,SN,ISHS09S/BK	
X202	2801-000274	CRYSTAL-UNIT;4.433619MHz,30ppm,28-AAM,20pF,	
X203	2801-000226	CRYSTAL-UNIT;3.579545MHz,20ppm,28-AAM,15pF,	
X901	2801-003224	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAY,12.5pF,	
Z208	2903-001040	FILTER-CERAMIC;TR,5.5/6.0/6.5MHz,-,1dB,-,TP,T	
Z210	2903-001019	FILTER-CERAMIC;TR,5.5/5.742MHz,-,-,-,TP,-	

ASSY-PCB,A/V

*	AA95-40004M	ASSY-PCB,A/V;-,CS5377/MVTX,SCT12A,-,-,-	
CA02	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA03	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA04	2202-000720	C-CERAMIC,MLC-AXIAL;8.2nF,20%,16V,Y5R,TP,3.5x19,-	
CA05	2202-000720	C-CERAMIC,MLC-AXIAL;8.2nF,20%,16V,Y5R,TP,3.5x19,-	
CA06	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CA07	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CN01A	AA39-20068E	LEAD-CONNECTOR,ASSY;-,YBNH025-08,67096-008,8P,500,	
CN05A	AA39-20069A	LEAD-CONNECTOR,ASSY;-,YBNH025-05,67096-005,5P,500,	
CN06A	AA39-20499B	LEAD CONNECTOR-ASSY;-,YBNH025-04,SMP025-04,4P,200,	
JE01	3722-000143	JACK-PHONE;1P(VER),3.4mm,AG,BLK,NO	
JR01	3722-001031	JACK-RCA;3P,3.6mm,#18,AU	
LA02	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA03	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA04	2701-000180	INDUCTOR-AXIAL;33uH,5%,2.5x3.4mm	
LA05	2701-000180	INDUCTOR-AXIAL;33uH,5%,2.5x3.4mm	
RA01	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RA02	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4mm	

ASSY-SOUND

*	AA95-40011H	ASSY-SOUND;-,CK,SCT57B,A2,-,-	
CA101	2401-000254	C-AL;100uF,20%,10V,LL,TP,8x11.5,5mm	
CA102	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0mm,	
CA103	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
CA104	2401-002042	C-AL;220uF,20%,10V,GP,TP,6.3x11,5mm	
CA105	2301-000148	C-FILM,PEF;10nF,5%,100V,TP,7x3.2x7mm,5mm	
CA106	2301-000235	C-FILM,PEF;3.9nF,5%,50V,TP,6.5x3.0x5.5mm,	
CA107	2301-000530	C-FILM,PEF;100nF,5%,100V,TP,11.5x12.5x6.5	
CA108	2301-000201	C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,5	
CA109	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
CA110	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
CA111	2401-000416	C-AL;10uF,20%,16V,GP,TP,5x11,5mm	
CA112	2401-000416	C-AL;10uF,20%,16V,GP,TP,5x11,5mm	
CA113	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA114	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA115	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA116	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA117	2401-000667	C-AL;2.2uF,20%,50V,WT,TP,5*11,5mm	
CA118	2301-000380	C-FILM,PEF;10nF,5%,50V,TP,6.5x3mm,5mm	
CA119	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
CNA01	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	
CNA02	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	
ICA01	1204-000515	IC-SOUND PROCESSOR;TDA9840/V2,DIP,20P,324MIL,PLAS	
ICA02	1204-001294	IC-DEMODULATOR;TDA9820,DIP,16P,300MIL,PLASTIC	
LA101	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LA102	2702-000131	INDUCTOR-RADIAL;2.2mH,5%,6.2x7.4mm	
RA101	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RA102	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA103	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA104	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RA105	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RA108	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
XA101	2801-000125	CRYSTAL-UNIT;10MHz,20ppm,28-AAM,32pF,30ohm,	
ZA101	2903-000185	FILTER-CERAMIC;BP,5.5MHz,+-75KHz,6dB,-,TP,-	
ZA102	2903-000185	FILTER-CERAMIC;BP,5.5MHz,+-75KHz,6dB,-,TP,-	
ZA106	2903-000307	FILTER-CERAMIC;BP,6.25MHz,50KHz,6.0dB,-,TP,-	
ZA107	2903-000307	FILTER-CERAMIC;BP,6.25MHz,50KHz,6.0dB,-,TP,-	

ASSY-PCB,PIP TTX

*	AA95-90030J	ASSY-PCB,PIP TTX;-,22-Q,SCT57B,SAA5261,CIS,-	
CNP01	3711-002704	CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGLE,SN	

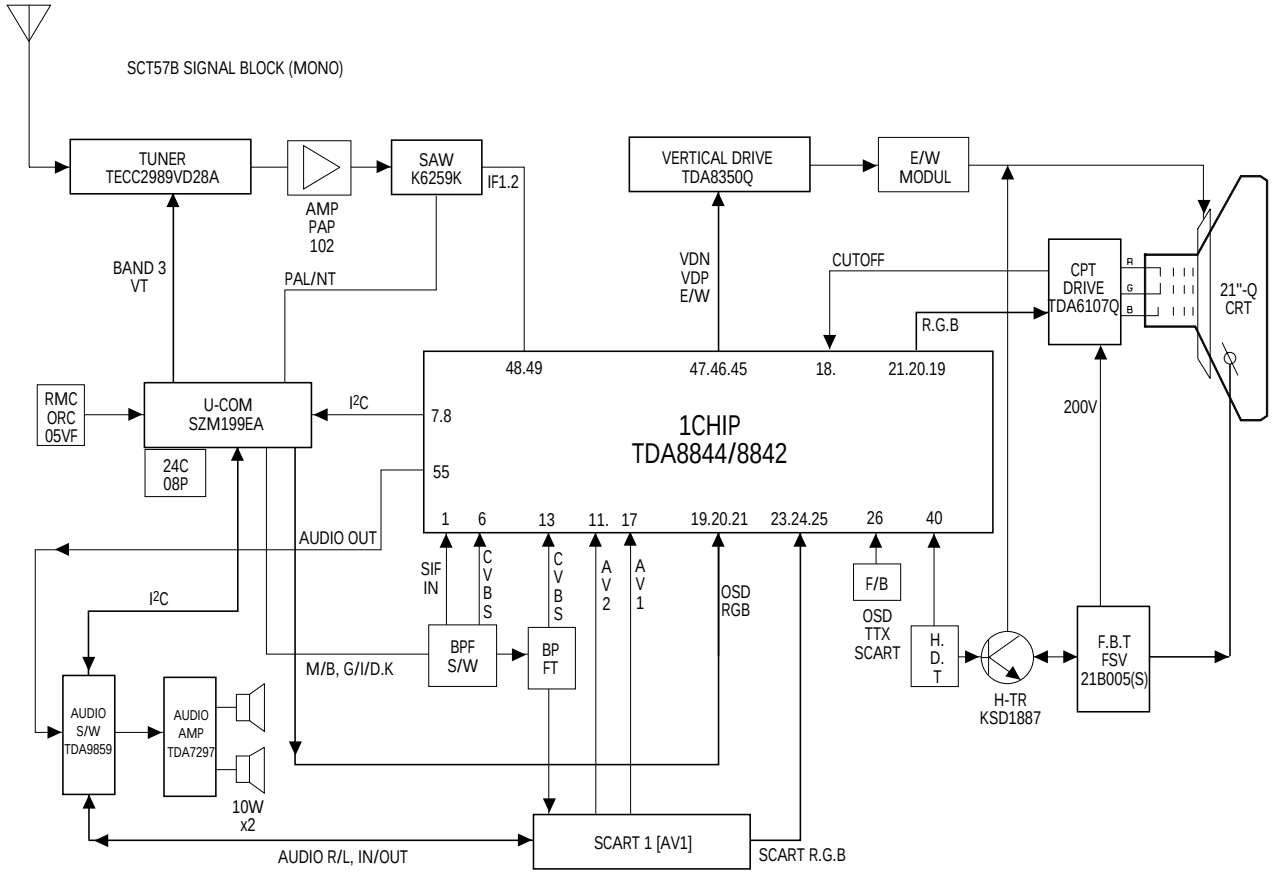
Loc. No.	Code No.	Description ; Specification	Remark
CNT01	3711-002702	CONNECTOR-HEADER;NOWALL,4P,1R,2.5mm,ANGLE,SN	
CNT02	3711-002703	CONNECTOR-HEADER;NOWALL,5P,1R,2.5mm,ANGLE,SN	
CNT03	3711-002705	CONNECTOR-HEADER;NOWALL,7P,1R,2.5mm,ANGLE,SN	
CP01	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP02	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP03	2401-000404	C-AL;10uF,20%,16V,BP,TP,6x11mm,5mm	
CP04	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP05	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP06	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP07	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP08	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP09	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP10	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP11	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP12	2203-000323	C-CERAMIC,CHIP;12nF,10%,50V,X7R,TP,2012,-	
CP13	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP14	2401-001515	C-AL;47uF,20%,16V,WT,TP,6x11mm,5mm	
CP15	2203-002232	C-CERAMIC,CHIP;3.3nF,20%,50V,X7R,TP,2012,-	
CP16	2203-000751	C-CERAMIC,CHIP;330nF,+80-20%,16V,Y5V,TP,2012,	
CP17	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP18	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP19	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP20	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP21	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP22	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012,-	
CP23	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,-	
CP24	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP25	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP26	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
CP27	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
CP28	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
CP29	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP30	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP31	2401-000242	C-AL;100uF,20%,10V,GP,TP,6x11,5mm	
CP32	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP33	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP34	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5mm	
CP35	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP36	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,-	
CP37	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11mm,5mm	
CP38	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-	
CP39	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP40	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP41	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP42	2401-000587	C-AL;1uF,20%,50V,BP,TP,5x11,5mm	
CP43	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP44	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CP45	2201-000273	C-CERAMIC,DISC;18pF,5%,50V,CH,TP,5x3mm,5	
CP46	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CP47	2203-000561	C-CERAMIC,CHIP;220nF,+80-20%,25V,Y5V,TP,2012,	
CT01	2401-000242	C-AL;100uF,20%,10V,GP,TP,6x11,5mm	
CT02	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT04	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT05	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT06	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT07	2401-000440	C-AL;10uF,20%,25V,GP,TP,5x11mm,5mm	
CT08	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT09	2203-000295	C-CERAMIC,CHIP;10pF,5%,50V,NPO,TP,2012,-	
CT10	2203-000295	C-CERAMIC,CHIP;10pF,5%,50V,NPO,TP,2012,-	
CT11	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
CT12	2401-000660	C-AL;2.2uF,20%,50V,GP,TP,5x11mm,5mm	
DP01	0401-000133	DIODE-SWITCHING;RLS4148,100V,200mA,500mW,4nS,S	
DT01	0401-000133	DIODE-SWITCHING;RLS4148,100V,200mA,500mW,4nS,S	
DZP02	0403-000662	DIODE-ZENER;MTZ3.0B,3.0V,3.01-3.22V,500mW,	
ICP01	1001-000223	IC-VIDEO SWITCH;TEA5114A,-,DIP,16P,334MIL,SING	
ICP02	1204-000530	IC-PAL/NTSC DECODER;TDA9160A,DIP,32P,400MIL,PLASTI	
ICP03	1204-001175	IC-PICTURE PROCESS;SDA9288X A141,SOP,32P,-,PLASTI	
ICT01	1204-001401	IC-PAL DECODER;SAA5261PS/102,DIP,52P,600MIL,P	
ICT02	1103-000128	IC-EEPROM;24C02,256*8BIT,DIP,8P,300MIL,1	
ICT03	1203-000641	IC-RESET;7442,TO-92,3P,-,PLASTIC,-0.3/7	
JP01	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JP02	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JT01	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JT02	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
LP01	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP05	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP09	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP10	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LP11	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
LT01	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
QP01	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP02	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP03	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP04	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP05	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP06	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP07	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP08	0501-000280	TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23,TP,70	
QP09	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QP10	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT01	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT02	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT03	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
QT04	0501-000342	TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT-23,TP,	
RP01	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP02	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP03	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP04	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP05	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP06	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP07	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP08	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP09	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP10	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012	
RP11	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP12	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP13	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP14	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP15	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP16	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP17	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP18	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP19	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP20	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP21	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP22	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RP23	2007-000830	R-CHIP;39Kohm,5%,1/10W,DA,TP,2012	
RP24	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RP25	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
RP26	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RP28	2007-000001	R-CHIP;68Kohm,5%,1/10W,DA,TP,2012	
RP29	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP30	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP31	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
RP32	2007-000642	R-CHIP;270ohm,5%,1/10W,DA,TP,2012	
RP33	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
RP34	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP35	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP36	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP37	2007-000023	R-CHIP;120ohm,5%,1/10W,DA,TP,2012	
RP38	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
RP39	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
RP40	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP41	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP42	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP43	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP44	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP45	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP46	2007-001009	R-CHIP;51Kohm,5%,1/10W,DA,TP,2012	
RP47	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
RP48	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RP49	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
RP50	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
RP51	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
RP52	2007-000728	R-CHIP;300ohm,5%,1/10W,DA,TP,2012	
RP53	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RP54	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RP55	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
RP56	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012	
RP57	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
RP58	2007-000703	R-CHIP;3.6Kohm,5%,1/10W,DA,TP,2012	
RP59	2001-001077	R-CARBON(S);150ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RP60	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RP61	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

Loc. No.	Code No.	Description ; Specification	Remark
RP62	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012	
RP63	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP64	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012	
RP65	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RP66	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT01	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT02	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT03	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT04	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT05	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
RT06	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT07	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
RT08	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
RT11	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT12	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012	
RT13	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT14	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012	
RT15	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
RT17	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RT18	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RT20	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT21	2007-000728	R-CHIP;300ohm,5%,1/10W,DA,TP,2012	
RT22	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT23	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT24	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT25	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT26	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT27	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT28	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RT29	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
RT30	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RT31	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
XP01	2801-000276	CRYSTAL-UNIT;4.433619MHz,40ppm,28-AAM,20pF,	
XP02	2801-000235	CRYSTAL-UNIT;3.579545MHz,40ppm,28-AAM,S,75o	
XP03	2801-003485	CRYSTAL-UNIT;21.059153MHz,30ppm,28-ABQ,17pF	
XT01	2801-003433	CRYSTAL-UNIT;12MHz,30ppm,28-AAA,30pF,30ohm,	

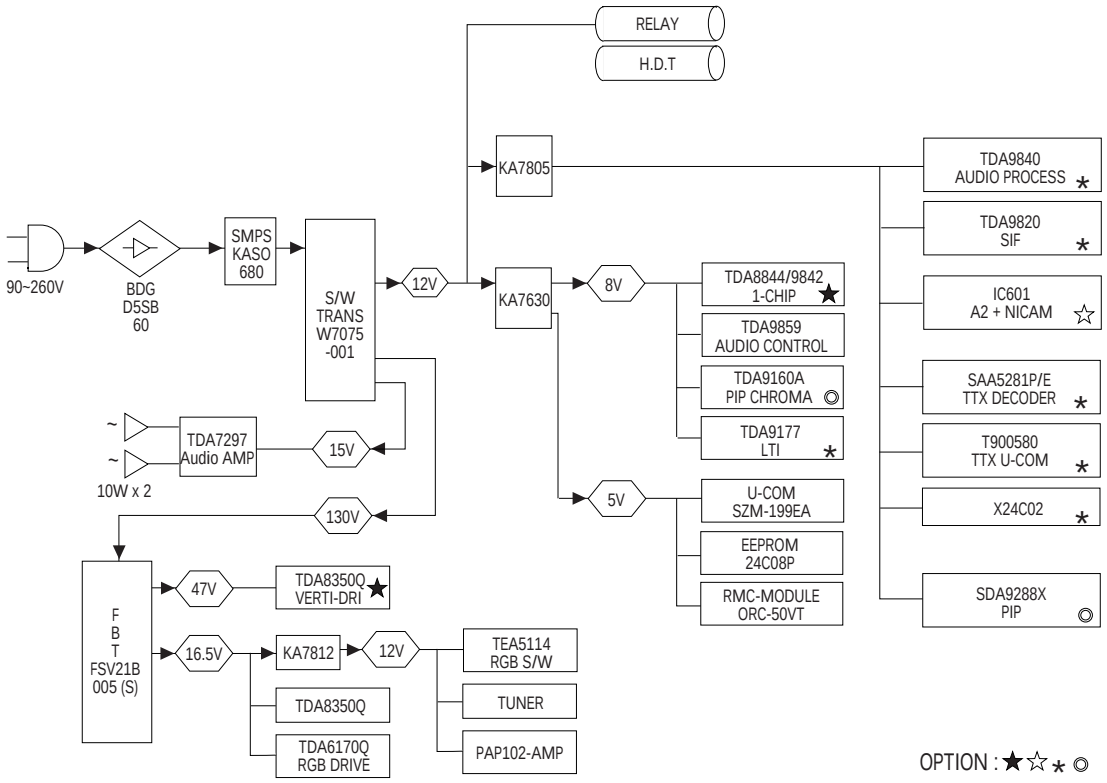
Loc. No.	Code No.	Description ; Specification	Remark
		ASSY-POWER,CORD	
⚠	AA39-10006X	POWER-CORD;-,KKP419C,KLCE-2F,2.286MT,3P,V	
	AA61-20284A	HOLDER;-,P-CORD,PP,VO,BLK,KE-002	
		REMOCON	
*	AA59-10084S	REMOCON;-,TM48,RM155AR,47,L/GRY,SS	
		ASSY-HOLDER,SPK	
*	AA91-60207A	ASSY-HOLDER,SPK;-,M-PP,HB,BLK/HORN,168mm,8R15W	
		ASSY-CRT	
⚠	AA03-10026K	CRT-COLOR;-,A53QCA891X(B),+380mG,21,90d	
⚠	AA27-50004N	DEFLECTION-YOKE;-,DSQ-2192AL,21/A53QCA691X,SH	
	AA27-60001K	MAGNET-CONVERGENCE;-,NY-291,29.1mm	
	AA63-60028A	SPACER-DY;NEOPRENE,-,BLK,V0 W12,-,-	
		ASSY-ACCESSORY	
	AA26-90001C	TRANS-MATCHING;-,300ohm/75ohm,PAL,40-890MHz	
	AA42-10001V	ANT-ROD;-,3S,620mm,BRN,UL/CSA	
	AA68-11204A	MANUAL-USERS;SCT57B,RUSSIA,TM51,B5,W/P 100(	

8. Block Diagram

8-1 Signal Block

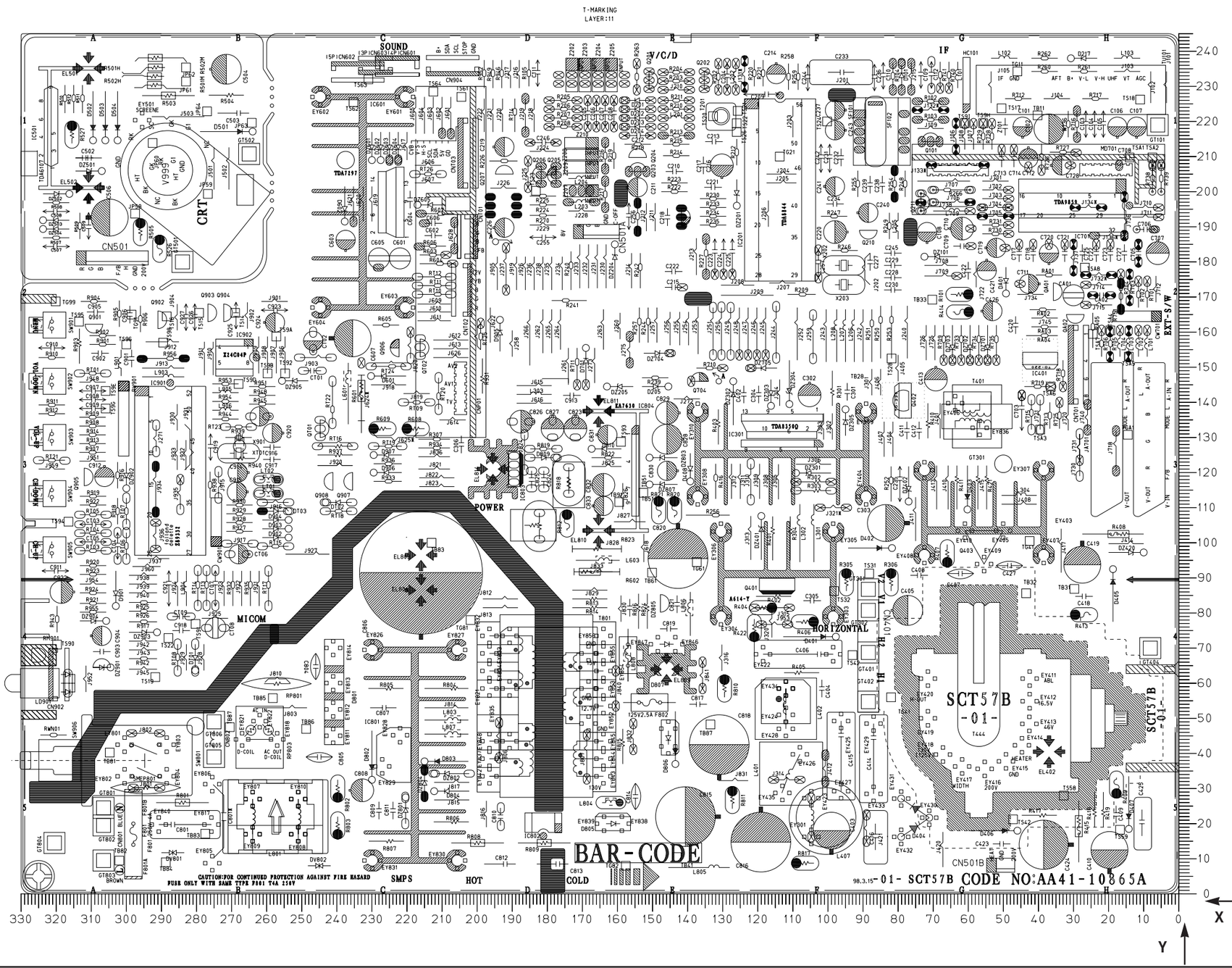


8-2 Power Block



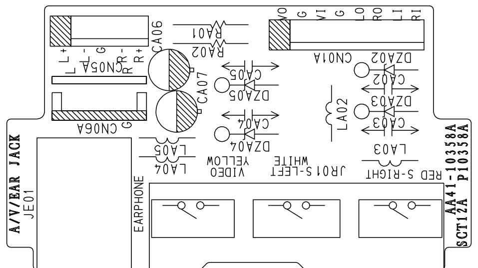
9. PCB Layout

9-1 PCB MAIN

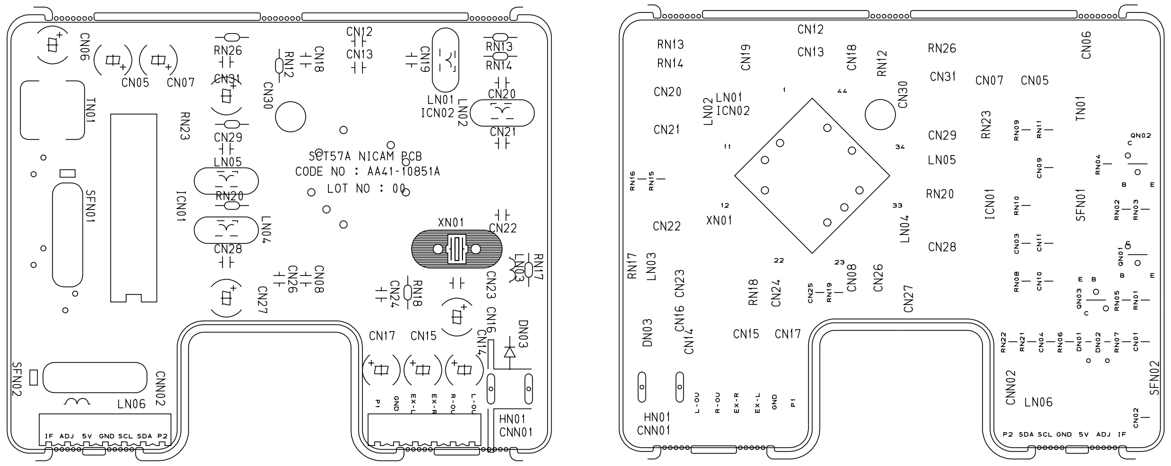


Loc. No.	X	Y
DIODE		
D101	79	236
D201	158	226
D202	158	223
D203	158	221
D204	158	218
D205	145	144
D217	30	238
D401	97	73
D402	81	98
D403	60	109
D404	79	16
D405	18	92
D406	46	18
D407	14	18
D408	139	117
D501	264	217
D502	309	214
D503	306	214
D504	302	214
D601	230	147
D602	237	191
D701	169	155
D801	241	45
D802	230	32
D803	215	37
D804	212	29
D805	158	20
D806	143	37
D807	146	64
D809	177	124
D810	167	126
D901	303	82
D902	253	101
D903	253	104
D904	253	106
D905	193	163
D906	229	120
D907	229	125
DA01	49	171
DT01	280	63
DT02	243	111
DT03	253	109
DV801	290	11
DV802	241	8
DZ101	72	181
DZ201	126	196
DZ204	160	185
DZ205	163	144
DZ301	109	119
DZ302	127	146
DZ303	116	139
DZ304	111	139
DZ305	95	138
DZ401	119	107
DZ402	77	111
DZ420	10	97
DZ421	188	193
DZ501	307	205
DZ502	316	199
DZ503	323	191
DZ504	323	189
DZ601	230	209
DZ602	227	209
DZ603	225	209
DZ604	222	209
DZ605	217	196
DZ701	54	152
DZ702	59	152
DZ703	64	152
DZ704	145	154
DZ705	122	149
DZ801	220	27
DZ802	212	34
DZ803	150	124
DZ804	215	35
DZ805	147	80
DZ807	150	116
DZ901	304	64
DZ902	300	115
DZ903	291	74
DZ904	305	77
DZ905	255	146
IC		
HC101	60	224
IC201	105	224
IC301	137	137
IC401	42	152
IC501	310	201
IC601	220	227
IC701	17	190
IC801	229	9
IC802	185	19
IC803	195	121
IC804	165	137
IC901	279	142
IC902	265	148
TRANSISTOR		
Q101	68	214
Q201	151	229
Q202	135	229
Q203	151	205
Q204	151	209
Q205	177	207
Q206	181	207
Q207	189	205
Q210	91	189
Q211	73	194
Q401	98	79
Q402	78	143
Q403	38	96
Q704	134	146
Q901	311	162
Q902	291	161
Q903	276	163
Q904	272	163
Q905	312	116
Q906	222	158
Q907	235	120
Q908	241	120
Q909	141	190
QA01	35	169
QA02	32	165

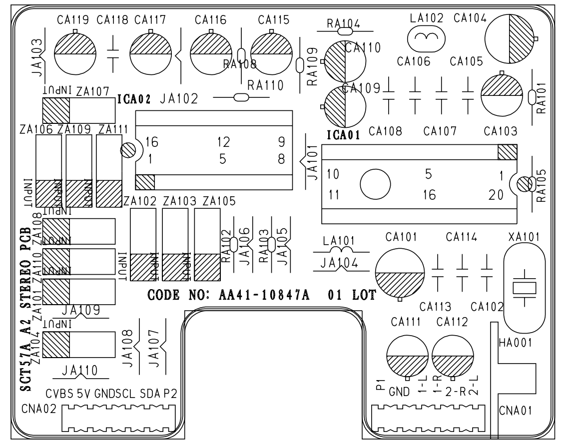
9-2 PCB-A/V



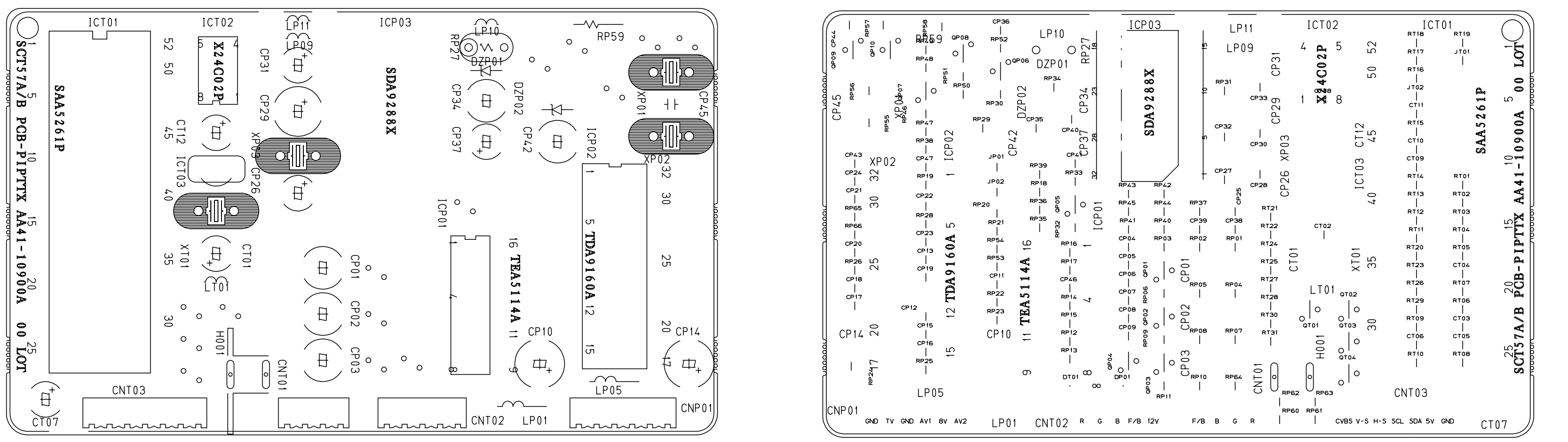
9-3 PCB-NICAM



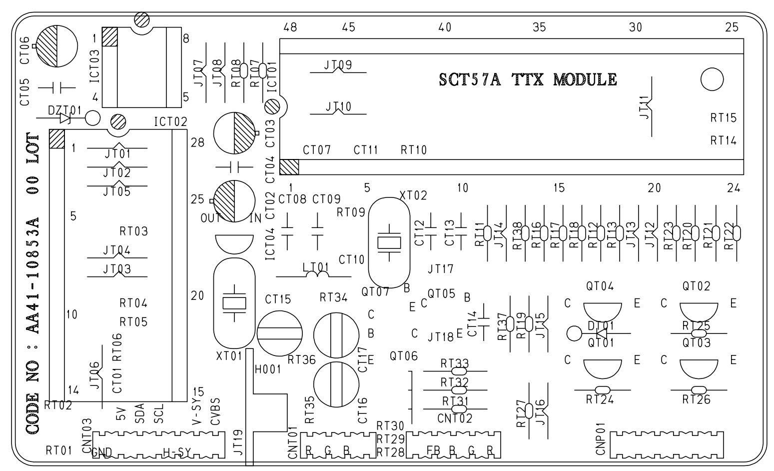
9-4 PCB-STEREO



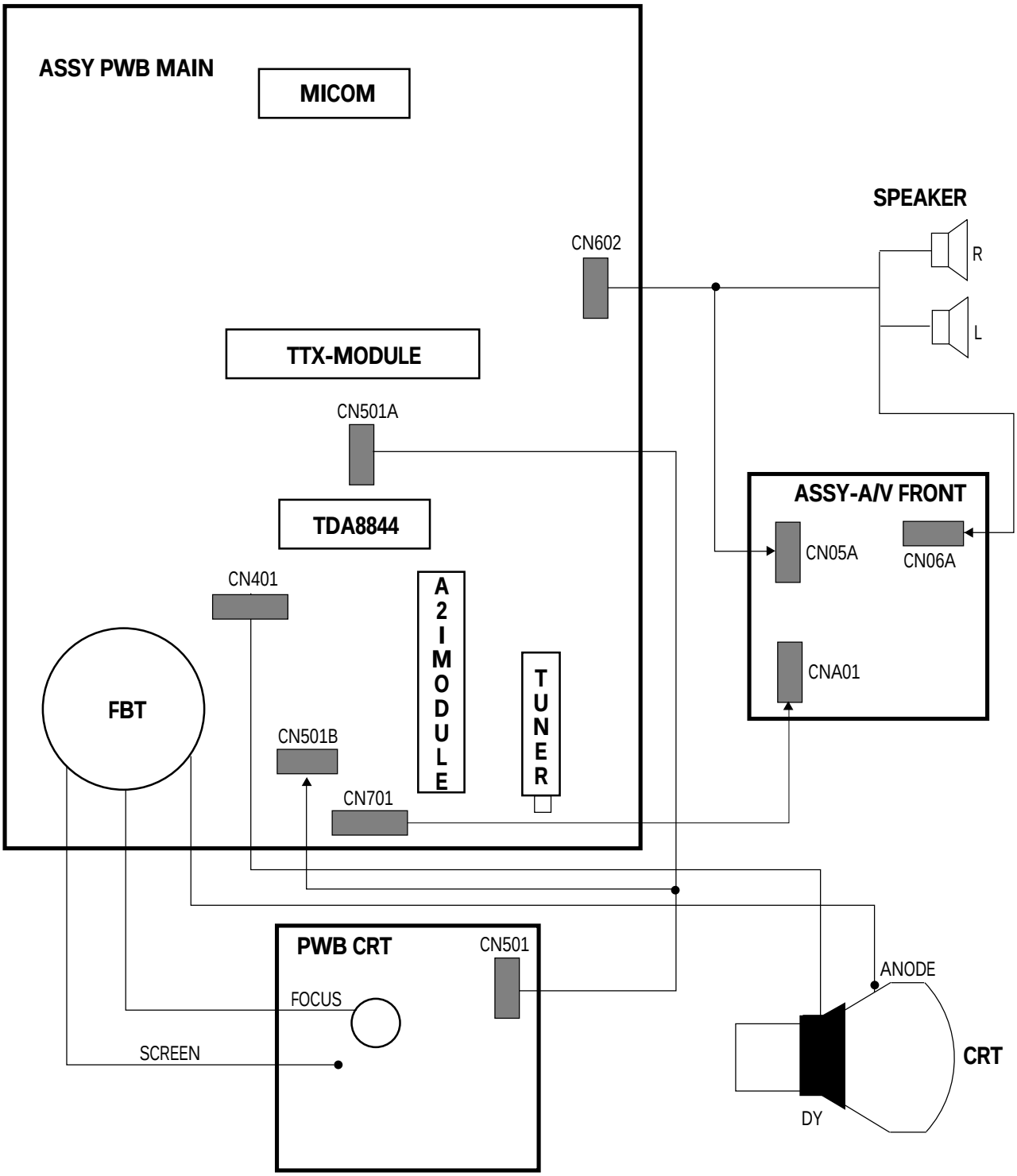
9-5 PCB-PIP



9-6 PCB-TTX

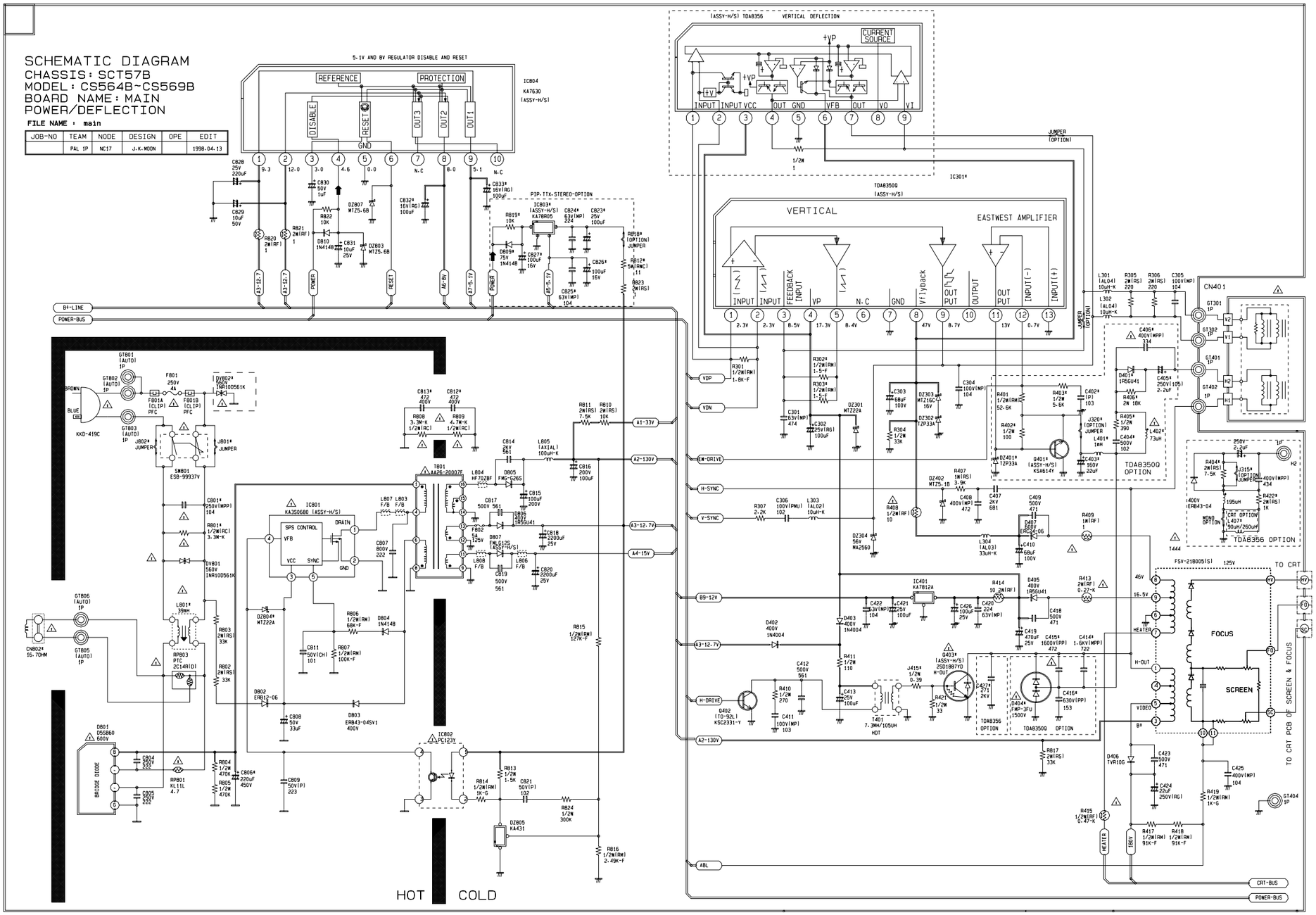


10. Wiring Diagram

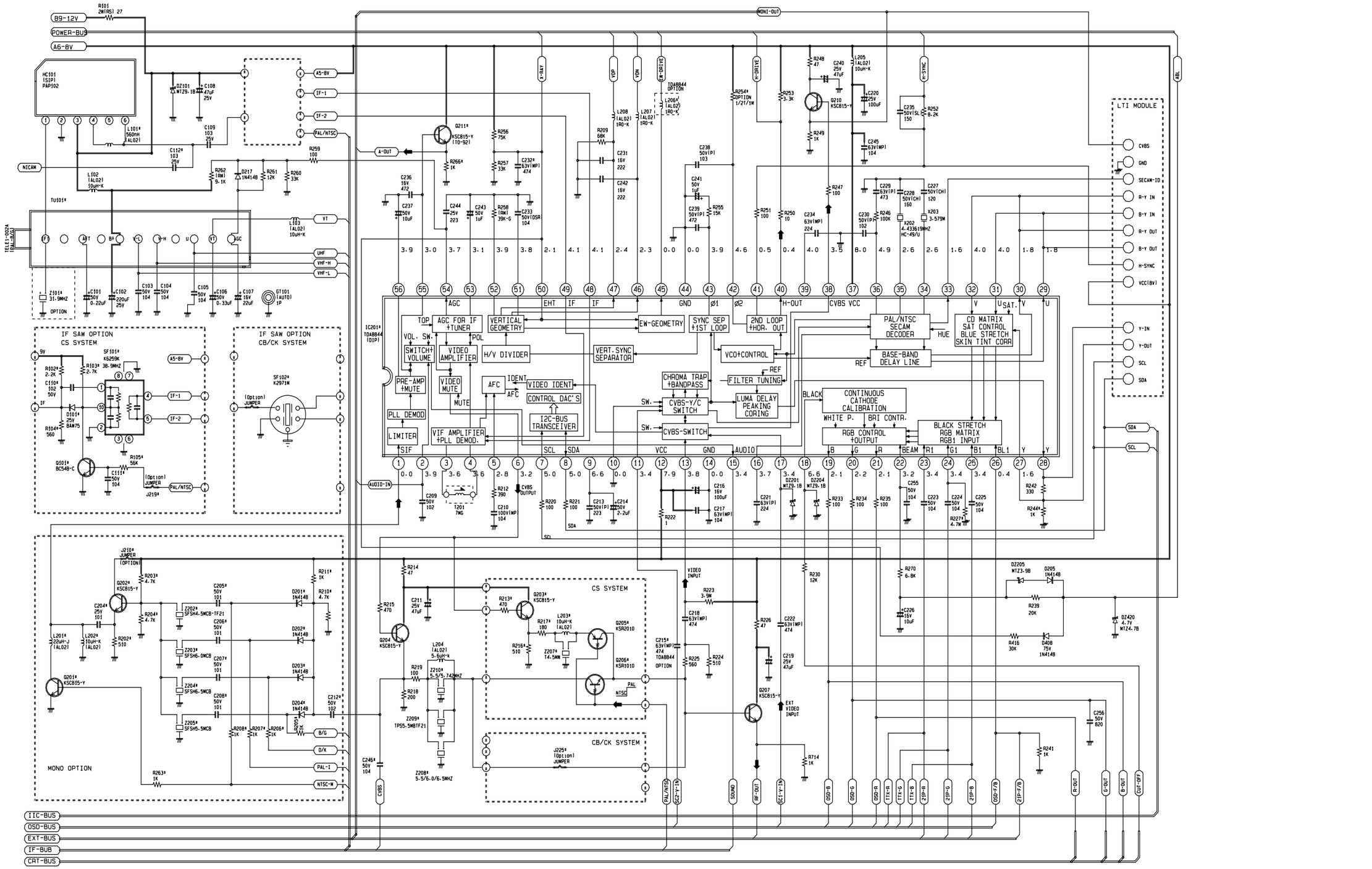


11. Schematic Diagrams

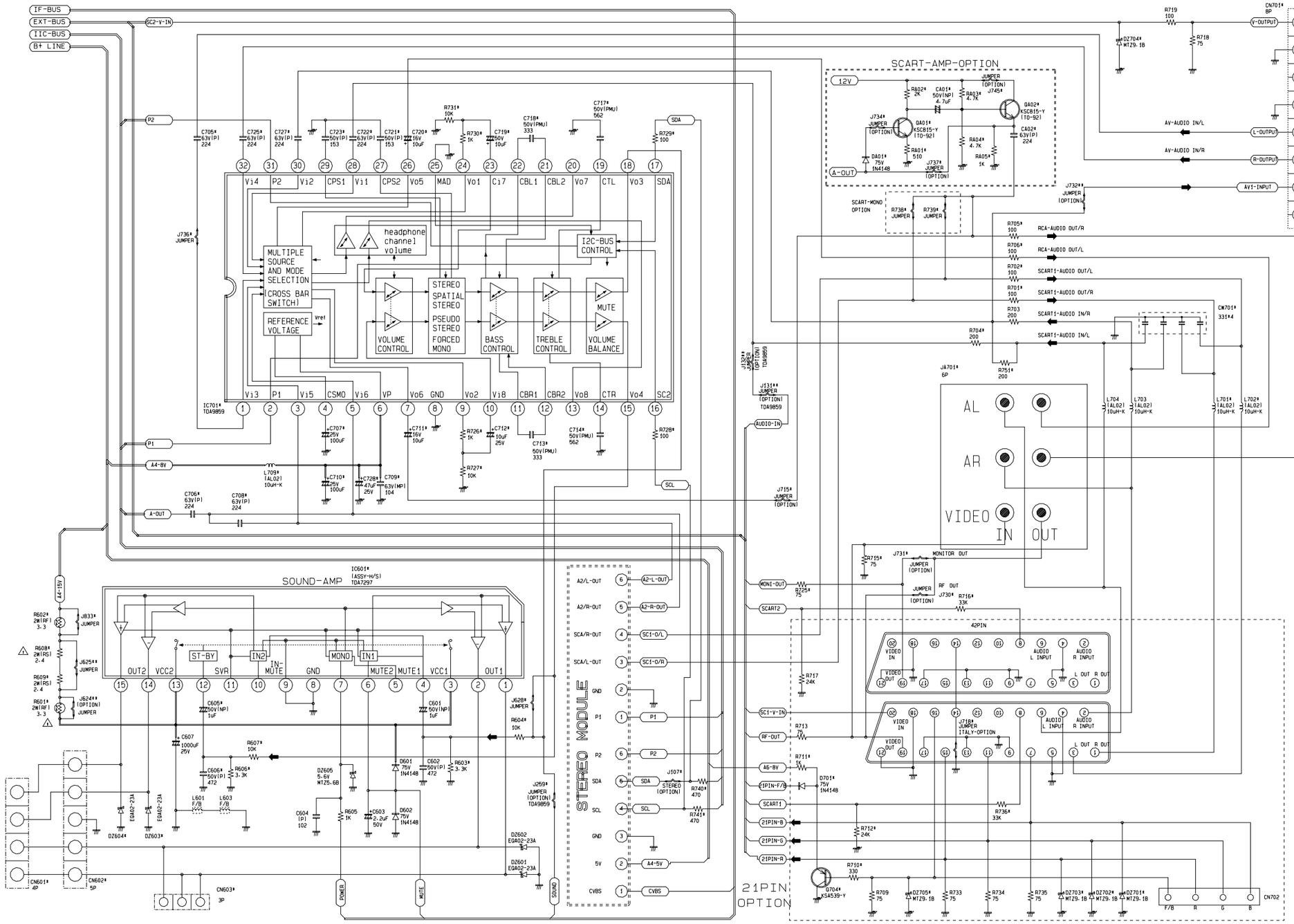
11-1 MAIN-POWER



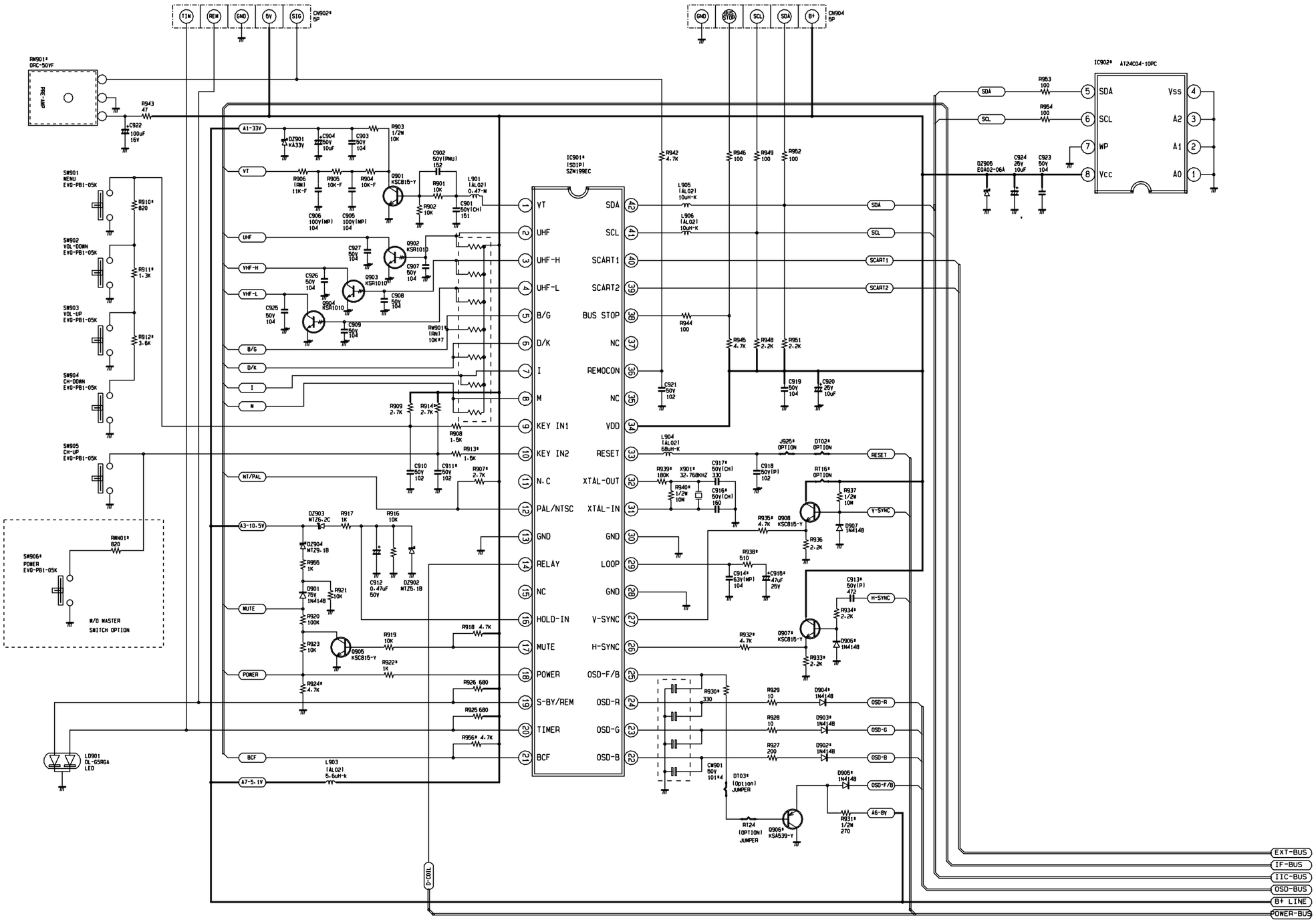
11-2 MAIN-CHROMA



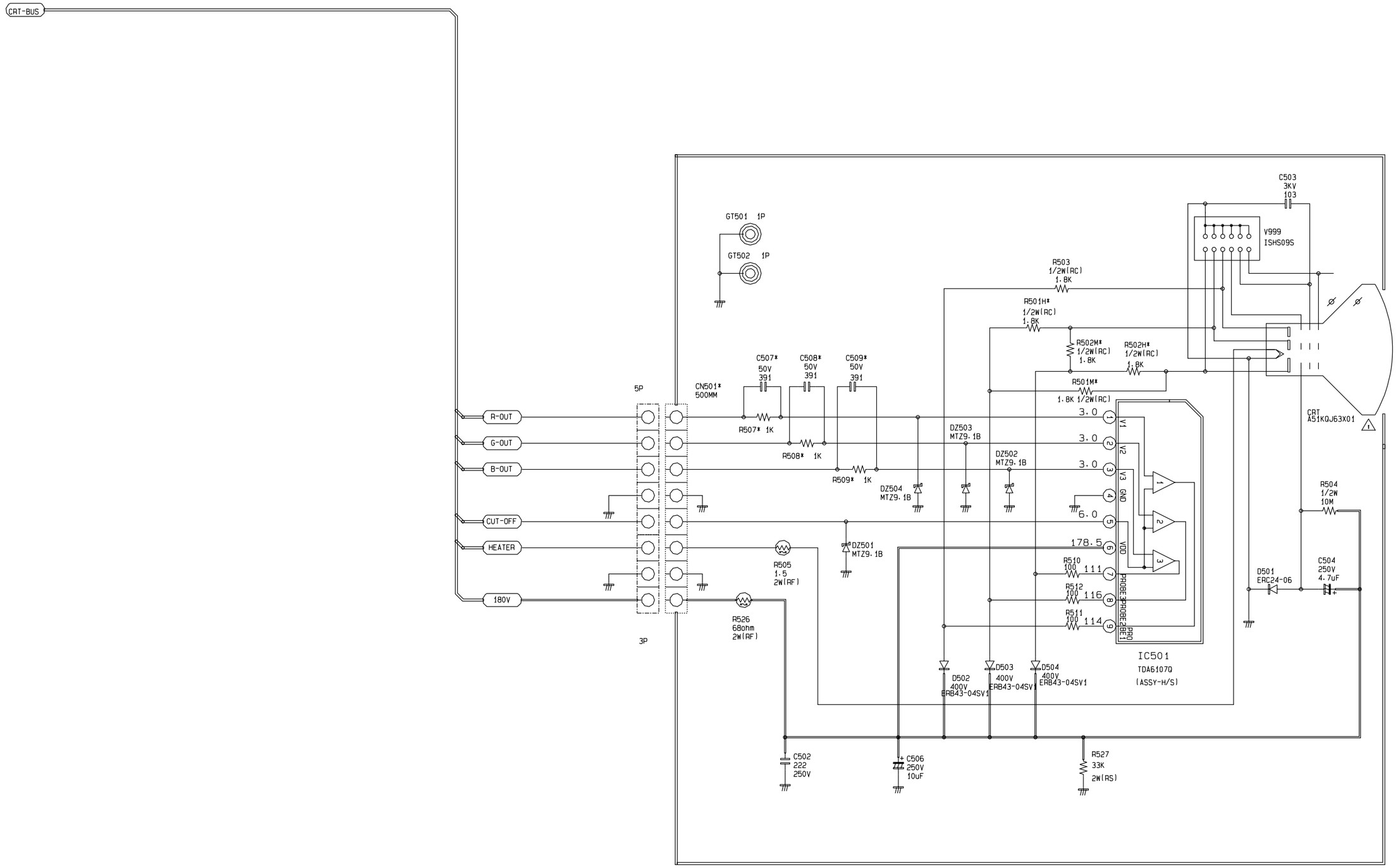
11-3 MAIN-AUDIO



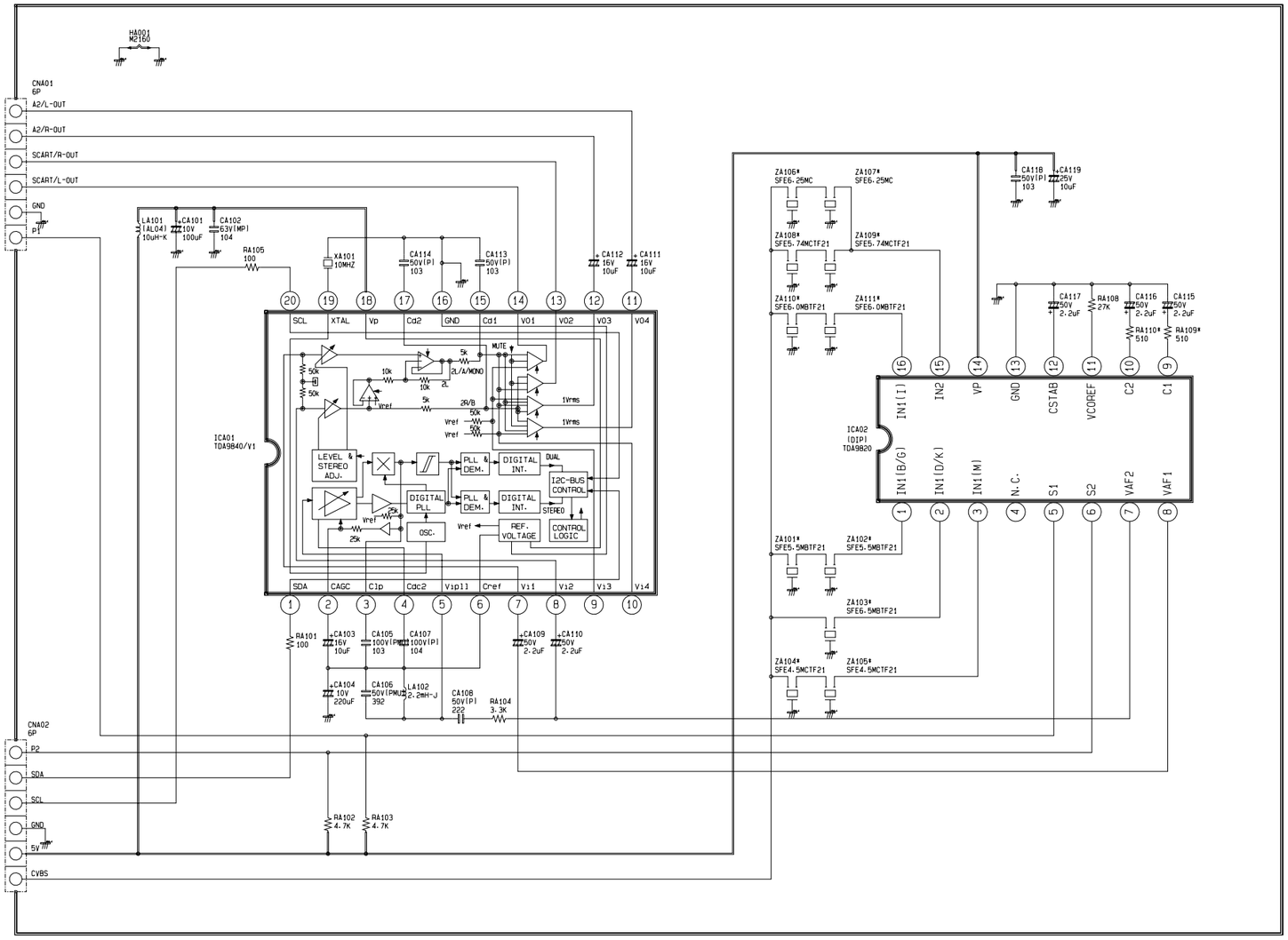
11-4 MAIN-U-COM



11-5 MAIN-CRT


CRT-BUS
R-OUT
G-OUT
B-OUT
CUT-OFF
HEATER
180V
5P
3P
CN501*
500MM
GT501 1P
GT502 1P
C507*
50V
391
C508*
50V
391
C509*
50V
391
R507* 1K
R508* 1K
R509* 1K
DZ504
MTZ9.1B
DZ503
MTZ9.1B
DZ502
MTZ9.1B
DZ501
MTZ9.1B
R505
1.5
2W(RF)
R526
68ohm
2W(RF)
C503
3KV
103
V999
ISHS09S
R503
1/2W(RC)
1.8K
R501H*
1/2W(RC)
1.8K
R502M*
1/2W(RC)
1.8K
R502H*
1/2W(RC)
1.8K
R501M*
1.8K 1/2W(RC)
3.0
3.0
3.0
6.0
178.5
R510
100
111
R512
100
116
R511
100
114
V1
V2
V3
GND
VDD
PROBE3
PROBE2
PROBE1
IC501
TDA6107Q
(ASSY-H/S)
D502
400V
ERB43-04SV1
D503
400V
ERB43-04SV1
D504
400V
ERB43-04SV1
CRT
A51KQJ63X01
R504
1/2W
10M
C504
250V
4.7uF
D501
ERC24-06
C502
222
250V
C506
250V
10uF
R527
33K
2W(RS)

11-6 STEREO SIF



LOGIC TABLE

STANDARD	P1 PIN5	P2 PIN6	FREQUNCY VCO1	FREQUNCY VCO2
B/G	1	1	5.5MHZ	5.74MHZ
NTSC-M	1	0	4.5MHZ	
PAL-I	0	1	6.0MHZ	
D/K	0	0	6.5MHZ	6.25MHZ

CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RM)
Fusible	(RF)
Cement·Wire	(RW)
Network	(RN)

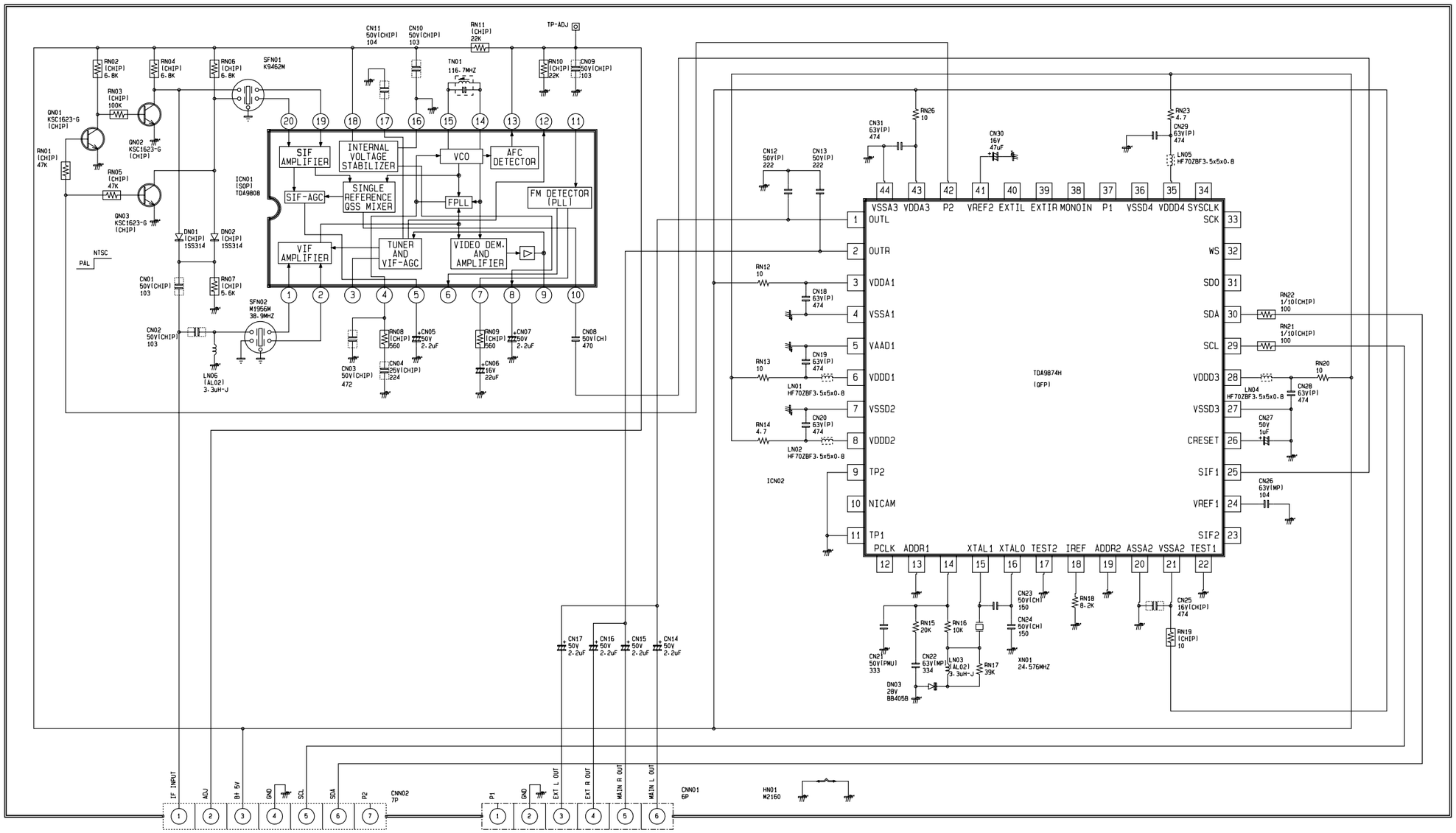
EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000
2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

The circuits are subject to change without notice to improve the picture quality.

11-7 MAIN-NICAM



CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RM)
Fusible	(RF)
Cement-Wire	(RW)
Network	(RN)

EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000

2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.

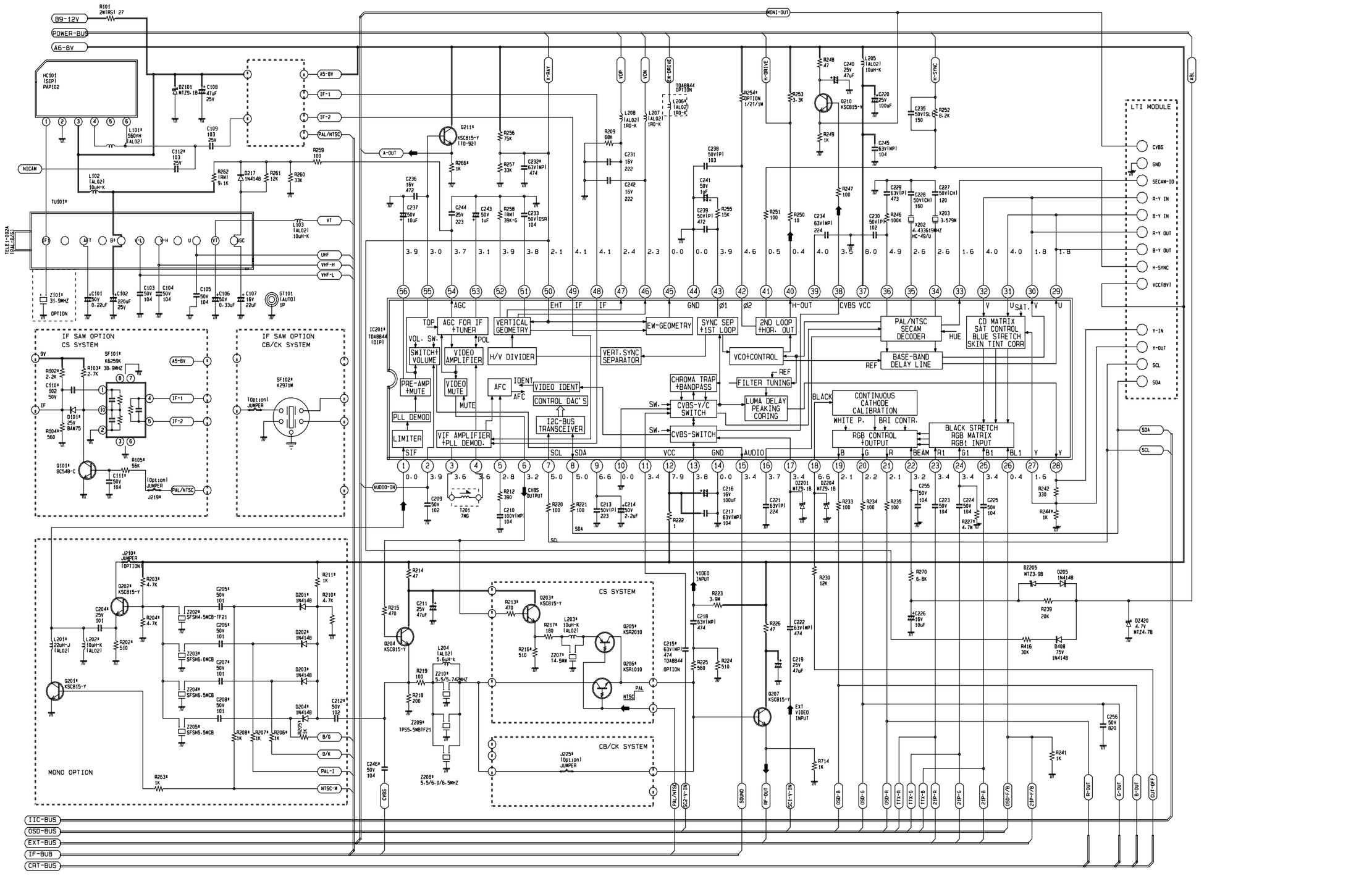
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

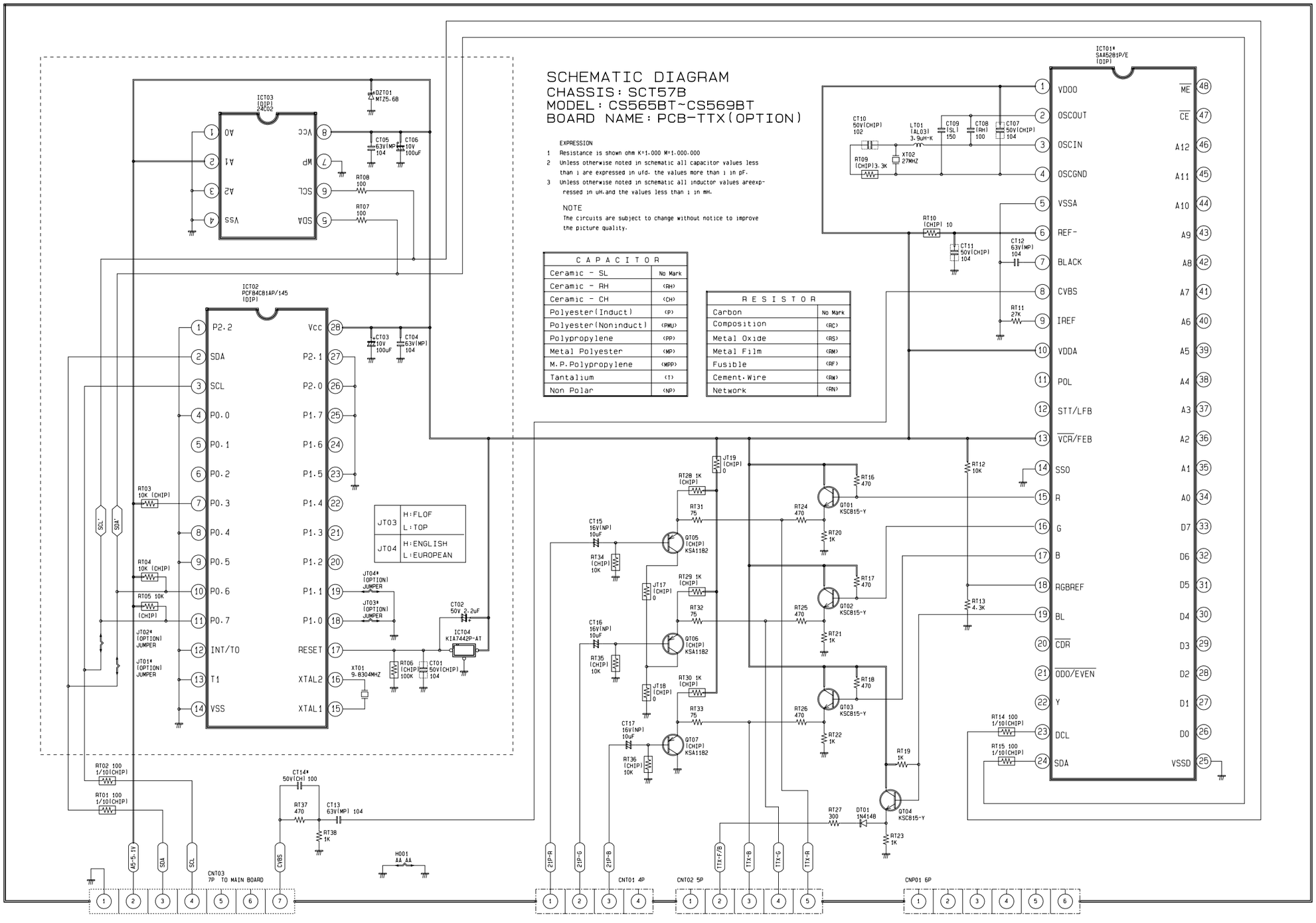
The circuits are subject to change without notice to improve the picture quality.

SCHEMATIC DIAGRAM
CHASSIS: SCT57B
MODEL: CS565BN~CS569BN
BOARD NAME: NICAM

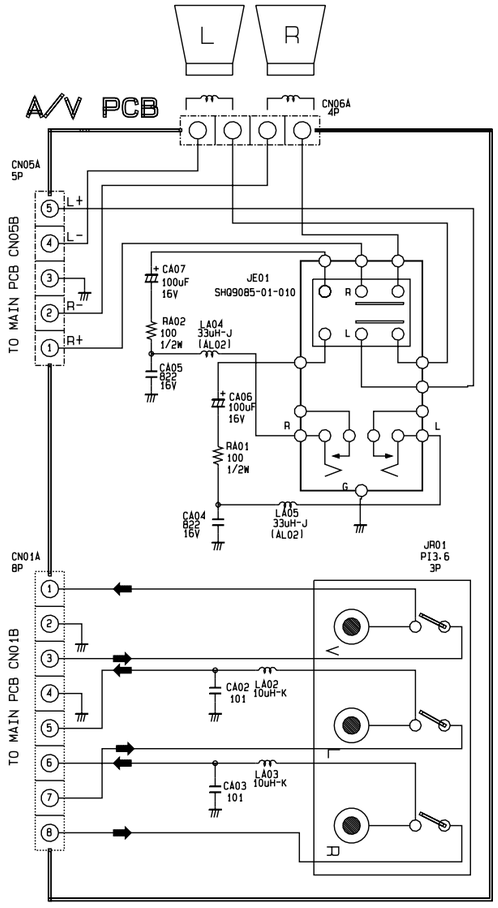
11-8 PIP-TTX


B9-12V
POWER-BUS
A6-8V
A5-8V
IF-1
IF-2
PAL/NTSC
A-OUT
NICAM
VT
UHF
VHF-H
VHF-L
MONI-OUT
ABL
LTI MODULE
CVBS
GND
SECAM-ID
R-Y IN
B-Y IN
R-Y OUT
B-Y OUT
H-SYNC
VCC(8V)
Y-IN
Y-OUT
SCL
SDA
IF SAW OPTION
CS SYSTEM
IF SAW OPTION
CB/CK SYSTEM
MONO OPTION
CS SYSTEM
CB/CK SYSTEM
AGC
EHT
IF
GND
H-OUT
CVBS VCC
AGC FOR IF +TUNER
VERTICAL GEOMETRY
EW-GEOMETRY
SYNC SEP +1ST LOOP
2ND LOOP +HOR. OUT
PAL/NTSC SECAM DECODER
CD MATRIX SAT CONTROL BLUE STRETCH SKIN TINT CORR
BASE-BAND DELAY LINE
VIDEO AMPLIFIER
H/V DIVIDER
VERT.SYNC SEPARATOR
VCO+CONTROL
PRE-AMP +MUTE
VIDEO MUTE
AFC
VIDEO IDENT
CONTROL DAC'S
I2C-BUS TRANSCEIVER
CHROMA TRAP +BANDPASS
FILTER TUNING
LUMA DELAY PEAKING CORING
CVBS-Y/C SWITCH
CVBS-SWITCH
CONTINUOUS CATHODE CALIBRATION
RGB CONTROL +OUTPUT
BLACK STRETCH RGB MATRIX RGB1 INPUT
PLL DEMOD
LIMITER
VIF AMPLIFIER +PLL DEMOD.
SIF
SCL
SDA
VCC
GND
AUDIO
AUDIO-IN
CVBS OUTPUT
VIDEO INPUT
EXT VIDEO INPUT
IIC-BUS
OSD-BUS
EXT-BUS
IF-BUB
CRT-BUS

11-9 TTX OPTION



11-10 PCB-A/V



EXPRESSION

1 Resistance is shown ohm K=1.000 M=1.000.000
2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in ufd. the values more than 1 in pF.
3 Unless otherwise noted in schematic all inductor values areexpressed in uH.and the values less than 1 in mH.

NOTE

The circuits are subject to change without notice to improve the picture quality.

RESISTOR	
Carbon	No Mark
Composition	(RC)
Metal Oxide	(RS)
Metal Film	(RW)
Fusible	(RF)
Cement.Wire	(RW)
Network	(RN)

CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester(Induct)	(P)
Polyester(Noninduct)	(PMU)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P.Polypropylene	(MPP)
Tantalium	(T)
Non Polar	(NP)

ELECTRONICS

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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances),* and Underwriters Laboratories *(UL Publication UL1410, 59.7).*

5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

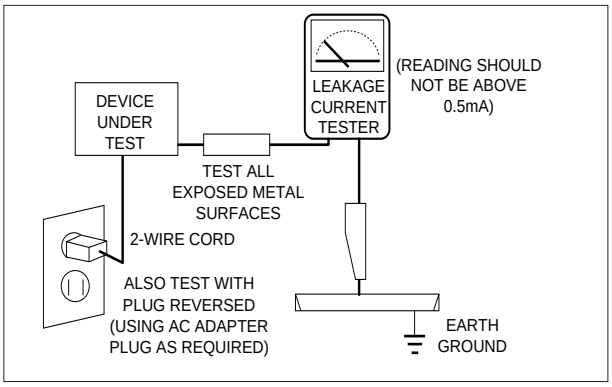

LEAKAGE CURRENT TESTER
(READING SHOULD NOT BE ABOVE 0.5mA)
DEVICE UNDER TEST
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.

7. X-ray Limits:
   The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.

8. High Voltage Limits:
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

   Heed the high voltage limits. These include the *X–ray Protection Specifications Label,* and the *Product Safety and X-ray Warning Note* on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

10. Design Alteration Warning:
    Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

11. Hot Chassis Warning:
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.

13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.

14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.

15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

16. Picture Tube Implosion Warning:
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

18. Product Safety Notice:
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, ( ) or (⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

WARNING1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

WARNING2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static"; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CI	PAL-I (UHF)
CII	PAL-I (VHF/UHF)
CX	PAL-B/G, SECAM-B/G
CK	PAL-B/G, D/K, SECAM-B/G, D/K
CW	PAL-B/G, D/K, SECAM-B/G, D/K, NT 4.43
CS	PAL-B/G, D/K, SECAM-B/G, D/K, NT4.43, NT3.58

Channels:

System / Band	PAL/SECAM-B/G,I	PAL, SECAM- D/K	SECAM-K1, PAL-D	NTSC - M
VHF	2 - 12	1 - 13	2 - 9	2 - 13
UHF	21 - 69	21 - 69	13 - 57	14-69

Intermediate Frequencies (MHz) :

SYSTEM / IF Carrier Frequency	PAL/ SECAM- B/G	PAL/SECAM-D/K, SECAM-K1	PAL - I	NTSC - M
Picture IF Carrier	38.90	38.90	38.90	38.90
Sound IF Carrier	33.40	32.40	32.90	34.40
Color Sub Carrier	34.47	34.47	34.47	35.32

Picture Tube:

14 Inch	A34KQV42X	Quick start, in-line-gun,
20 Inch	A48KRD82X	Black stripe, 90° degree deflection
22 Inch	A53QCA891X	

Power Requirements: AC 100 ~ 260V, 50/60Hz or AC 160 ~ 260V, 50/60Hz

Antenna Input Impedance: VHF, UHF : Telescopic dipole antenna (75 ohm unbalanced type)

Speaker Impedance 10W + 10W/8 ohm, 3W/16 ohm, 5W + 5W/16 ohm

2-2 IC Line Up

Table 2-1 IC Line Up

Loc No.	No.	Specification	Description	Remarks
HIC101	1	PAP102T	IF PRE-AMP	
IC202	2	TDA8844	PAL-B/G, SECAM-B/G,NTSC, SECAM-L	
		TDA8843	PAL-B/G, SECAM-B/G, SECAM-L	
		TDA8375A	PAL-B/G, SECAM-B/G, NTSC, SECAM-L, E/W ADJ.	
		TDA8375	PAL-B/G, SECAM-B/G, NTSC, SECAM-L, E/W ADJ.,16:9	
IC301	3	TDA8350Q	VERTICAL DEFLECTION AMP	
IC401	4	KA7812	REGULATOR (12V)	
IC501	5	TDA6107Q	RGB DRIVE AMP	
IC601	6	TDA7297	SOUND-AMP (10W+10W)	
IC701	7	TDA9859	AUDIO PROCESSOR	
IC801	8	KA3S0680 KA3S0880	POWER IC 6A, 800V POWER IC 8A, 800V	
IC802	9	LTV817B	PHOTO COUPLER	
IC803	10	KA78R05	REGULATOR IC	
IC804	11	KA7630	REGULATOR (5V, 8V)	
ICT01	12	SAA5281 P/E SAA5281 P/H	TTX-DECODER	RUSSIAN
IC901	13	SZM-199EA SZM-199ER	μ-com	
IC902	14	AT24C04 AT24C08	E^2-PROM	
ICA01	15	TDA9840	SOUND PROCESSOR	SOUND MODULE
ICA02	16	TDA9820	INTER-CARRIER SOUND DEMODULATOR	SOUND MODULE
IC6001	17	TDA9874H	NICAM+A2 SOUND DEMODULATOR	SOUND MODULE
ICL101	18	TDA9177	Y.U.V TRANSIENT IMPROVEMENT PROCESSOR	

Option: OSD Language

Table 2-2			
Loc No.	Specification	Description	Remarks
IC901	SZM-199EA	ENG/ARAB/FRENCH	
	SZM-199EC	ENG/CHINESE	
	SZM-199EW	ENG/CRO/BUL/POLISH/RUMANIAN/CZECH/CRO	
	SZM-199EE	ENG/GER/FRENCH/SPANISH/SWEDISH/DUTCH/ITALIAN	
	SZM-199ET	ENG/MAL/IND/VIETNAMESE/THAI	
	SZM-199ER	ENG/RUSSIAN	

2-3 Semiconductor Base Diagrams

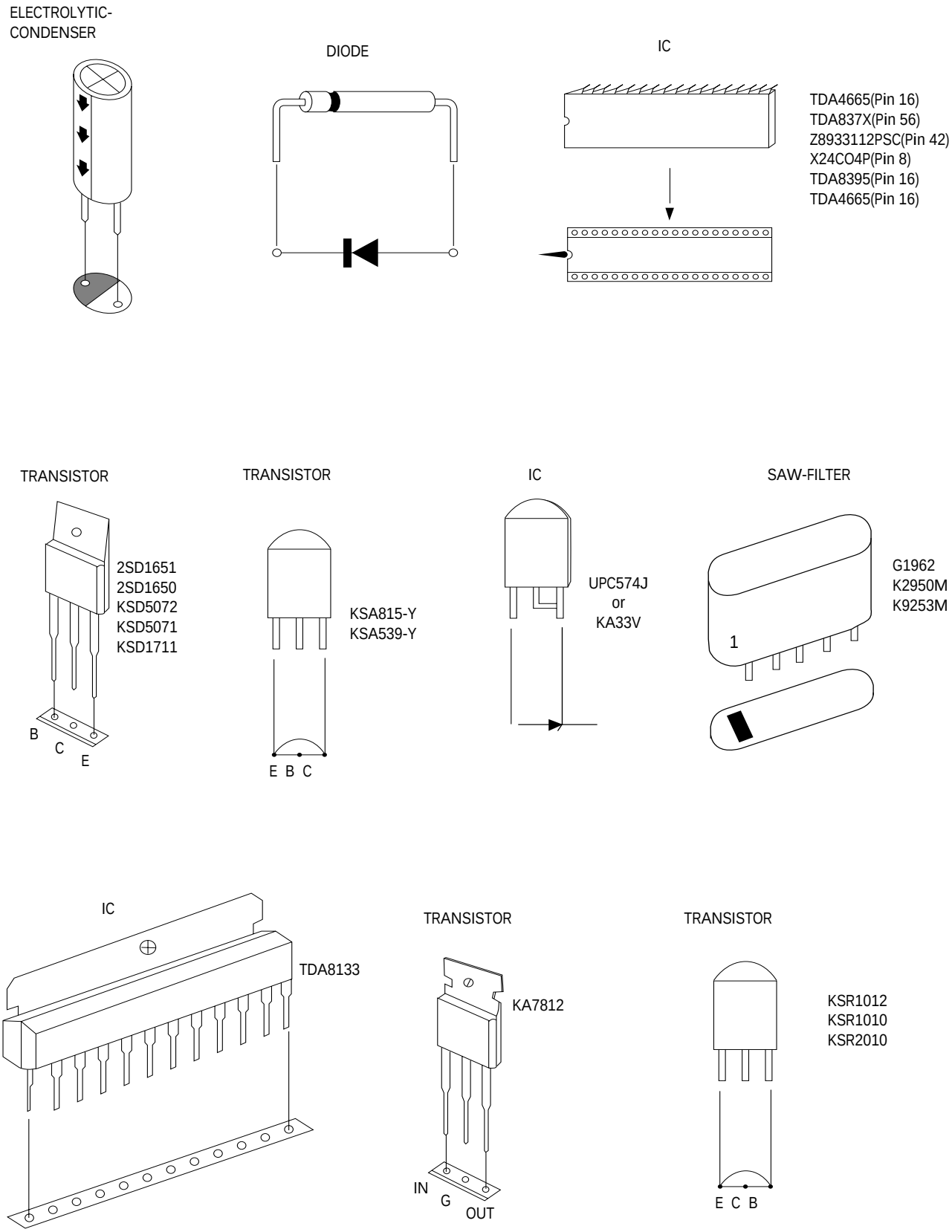
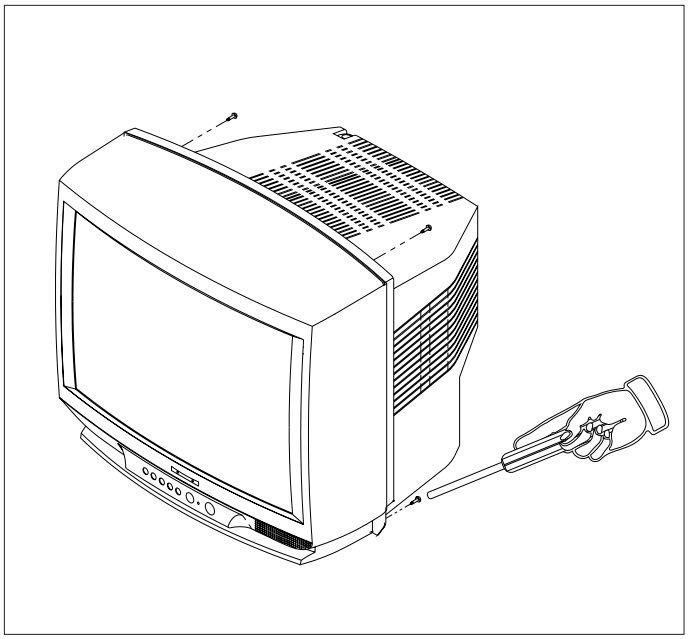


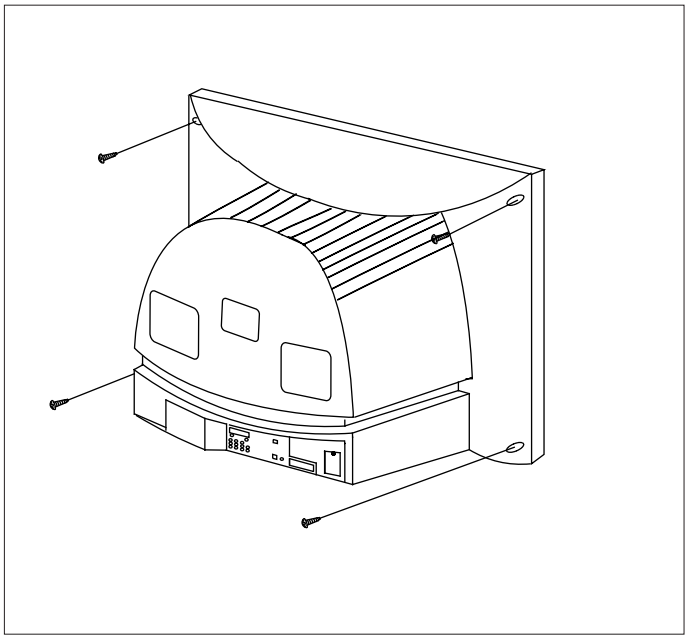
Fig.2-1 Semiconductor Base Diagrams

3. Disassembly and Reassembly

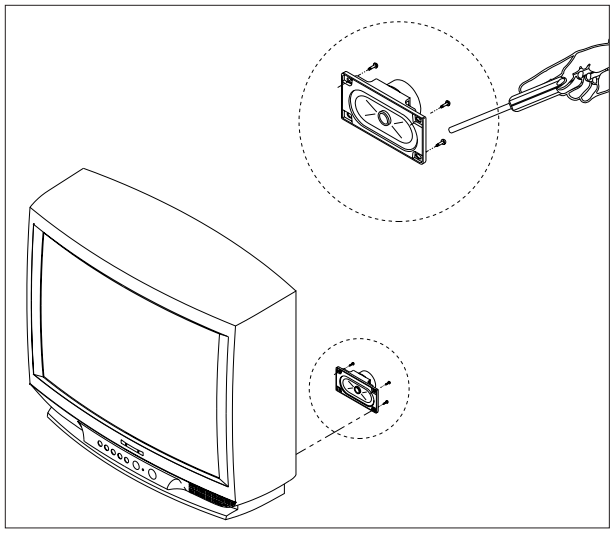
3-1 Back Cover Removal

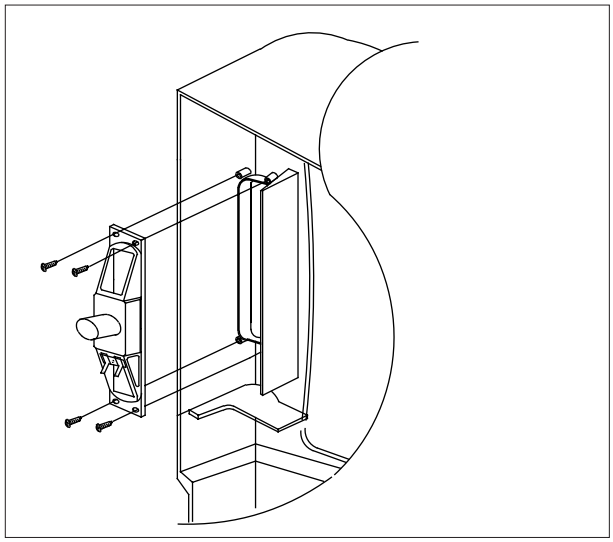


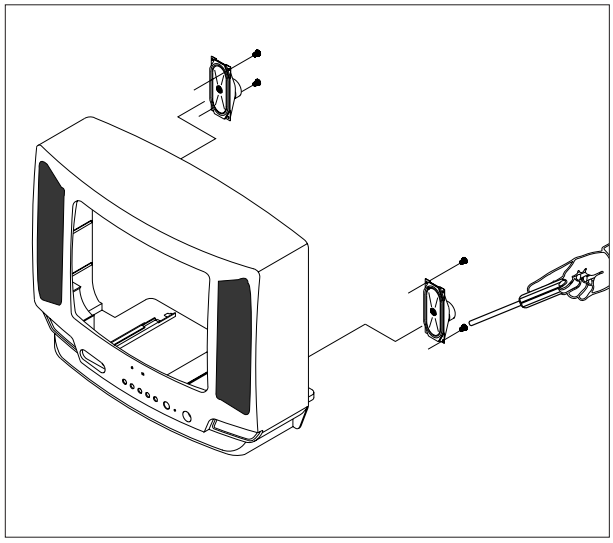
1. After removing the 9 screws, pull the cabinet backwards.



3-2 Speaker Removal

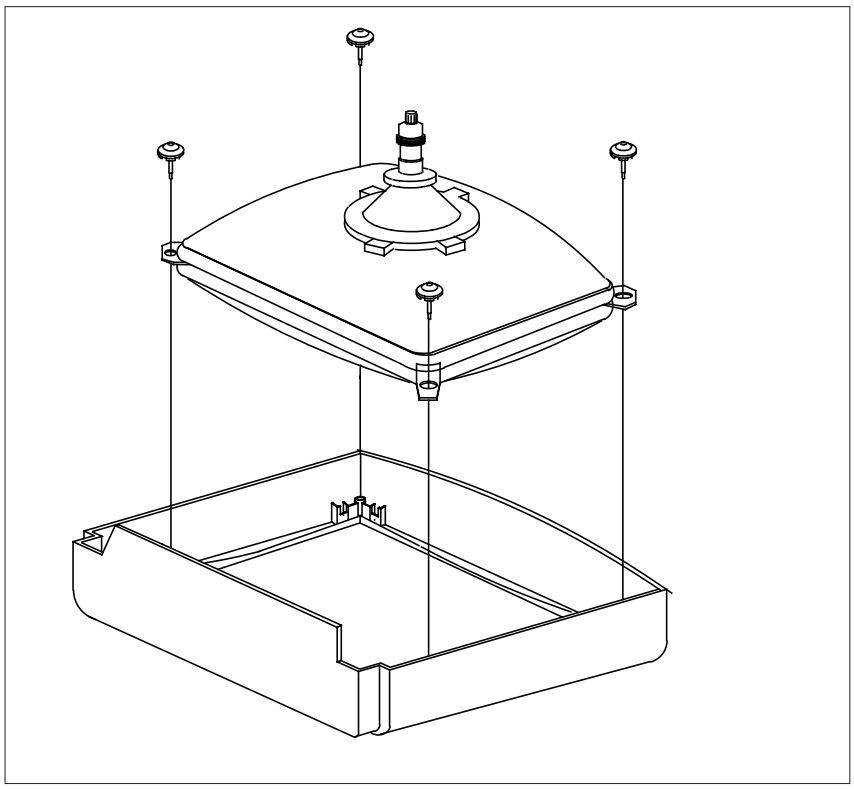






1. Loosen the 4 screws and remove the holder - speakers.

3-3 CRT Removal



1. Spread a soft mat on the floor. Place the TV set face down.
2. Remove the 4 screws mounting the CRT to the front cabinet.
3. Lift the CRT.

MEMO

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.

2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.

3. Do not tamper with the "Adjustment" screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.

2. After IC902 is replaced, warm up the TV for 10 seconds

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence:

   White Balance
   Sub-Brightness
   Vertical Center
   Vertical Size
   Horizontal Size
   Fail Safe (This adjustment must be the last step.)

2. If the EEPROM or CRT is replaced, set PSL and PVA to 15 and 63 (Factory Mode).

4-2 Factory/Service Mode

4-2-1 Procedure for the "Adjustment" Mode

1. This mode uses the standard remote control. The Service Mode is activated (1) by pressing the (Display → (FACTORY) service key or (2) by entering the following remote-control sequence:

   STAND-BY→DISPLAY→ P-STD → MUTE → POWER ON

2. The "SERVICE (FACTORY)" message will be displayed. The Service Mode has four components: Adjustment, Test Pattern, Option Bytes and Reset.

3. Access the Adjustment Mode by pressing the "VOLUME" keys (Up or Down). The adjustment parameters are listed in the accompanying table. Select them by pressing the CHANNEL keys (▲,▼).

4. Selection sequences for the PAL system:

   DOWN or UP key:

   VCO>SBT>SCT>SCR>SC>RG>CDL>STT>LCO>LA>PSL>PVS>PVA>PHS>PEW>PEP>PEC>PET>LSC>TSC>SA>NSL>NVS>NVA>NHS>NEW>NEP>NEC>NET

5. Selection sequences for the NTSC system:

   DOWN or UP key:
   NVS>NVA>NSL>NHS>NEW>NEP>NEC>NET

6. The VOLUME keys increase or decrease the adjustment values, (stored in the non-volatile memory when Adjustment Mode is cancelled).

7. Cancel the Adjustment Mode by re-pressing the "Factory" or "Power on" keys.

4-2-2 Main Adjustment Parameter

Table 4-1 Main Adjustment Parameter (Zilog μ-com)				
FUNCTION	OSD ABBREVIATION	RANGE	ADJUSTMENT DATA	INITIAL
AUTO GAIN CONTROL	AGC	0 ~ 63 STEP	15	15
VOLTAGE CONTROLLED OSCILLATOR	VCO	0 ~ 127 STEP	60 ~ 75	63
SUB BRIGHT	SBT	0 ~ 23 STEP	6 ~ 10	7
SUB CONTRAST	SCT	0 ~ 23 STEP	7	7
SUB COLOR	SCR	0 ~ 23 STEP	15 FIXED	15
S-CORRECTION	SC	0 ~ 63 STEP	11 FIXED	11
RED DRIVE (GAIN)	RG	0 ~ 7 STEP	25 ~ 45	31
BLUE DRIVE (GAIN)	BG	0 ~ 127 STEP	25 ~ 45	31
CATHODE DRIVE LEVEL	CDL	0 ~ 9 STEP	-	4
SUB TINT	STT	0 ~ 63 STEP	0 ~ 10	5
SECAM-L CONTROLLED OSCILLATOR	LCO	0 ~ 63 STEP	63 FIXED	63
SOUND LEVEL ADJUSTMENT	LA	0 ~ 63 STEP	5	5
PAL VERTICAL SLOPE	PSL	0 ~ 63 STEP	20 ~ 25	25
PAL VERTICAL SHIFT	PVS	0 ~ 63 STEP	25 ~ 35	31
PAL VERTICAL AMPLITUDE	PVA	0 ~ 63 STEP	35	31
PAL HORIZONTAL SHIFT	PHS	0 ~ 63 STEP	35 ~ 45	40
PAL EW-WIDTH	PEW	0 ~ 63 STEP	35 ~ 45	38
PAL EW-PARABOLA	PEP	0 ~ 63 STEP	0 ~ 10	22
PAL EW CORNER PARABOLA	PEC	0 ~ 63 STEP	15 ~ 30	22
PAL EW-TRAPEZIUM	PET	0 ~ 63 STEP	15 ~30	30
VERTICAL SCROLL	VSC	0 ~ 63 STEP	31 FIXED	25
TTX SUB CONTRAST	TSC	0 ~ 63 STEP	10 ~ 30	15
SEPARATION ADJUSTMENT	SA	0 ~ 49 STEP	25	25
NTSC VERTICAL SLOPE	NSL	0 ~ 63 STEP	25 FIXED	25

Table 4-1 Main Adjustment Parameter (Zilog μ-com)(Continued)				
FUNCTION	OSD ABBREVIATION	RANGE	ADJUSTMENT DATA	INITIAL
NTSC VERTICAL SHIFT	NVS	0 ~ 63 STEP	35 ~ 45	44
NTSC VERTICAL AMPLITUDE	NVA	0 ~ 63 STEP	25 ~ 35	28
NTSC HORIZONTAL SHIFT	NHS	0 ~ 63 STEP	35 ~ 50	45
NTSC EW-WIDTH	NEW	0 ~ 127 STEP	35 ~ 45	37
NTSC EW PARABOLA	NEP	0 ~ 63 STEP	15 ~ 30	21
NTSC EW-CORNER PARABOLA	NEC			20
NTSC EW-TRAPEZIUM	NET			30

NOTE : PVS,PVA, PHS, NVS, NVA,NHS parameters must be aligned using both the 50Hz and 60Hz vertical-field rates.

4-2-3 Test Pattern

1. This mode can be used during servicing, or for confirming that the convergence and purity adjustments are correct.

2. Access the Test Pattern parameters by pressing a CHANNEL keys (▲,▼) while the Service Mode is on. The cursor will move to the test pattern. Press the VOLUME keys. On-screen display:

   ■ RED
   ■ GREEN
   ■ BLUE

3. AGING Mode (Reference Only)

   This pattern is used for pre-heating the CRT during manufacturing--it is accessed in the factory by twice pressing the "HIDDEN" key .

   Even if the TV power is cut off, the Aging Mode is not cancelled, The patterns are displayed at 5 sec intervals. The AGING mode is cancelled by repressing the "HIDDEN" key.

4-2-4 MICOM Option Byte Table

<table>
<tr><th>BYTE</th><th>BIT</th><th>LOW</th><th>HIGH</th><th>REMARK</th></tr>
<tr><td rowspan="10">B
Y
T
E
0</td><td rowspan="2">D7
D6</td><td colspan="3"><table>
<tr><th>D7</th><th>D6</th><th>Middle East / Arab</th><th>South East / Asia</th><th>China</th><th>Western/Eastern</th><th>CIS</th></tr>
<tr><td>0</td><td>0</td><td>English/Arabian</td><td>English/Thai</td><td>English/
Chinese</td><td>English/German/French/
Spanish/Italian/Swedish/Dutch</td><td>-</td></tr>
<tr><td>0</td><td>1</td><td>English/Arabian/French</td><td>English/Vietnamese</td><td>-</td><td>English/Hungarian/Polish/
Rumanian/Czech/Croatian</td><td>English/
Russian</td></tr>
<tr><td>1</td><td>0</td><td>English/French</td><td>English/Malay</td><td>English</td><td>English/French</td><td>-</td></tr>
<tr><td>1</td><td>1</td><td>English Only</td><td>English/Malay/Indonesian</td><td>-</td><td>English</td><td>English</td></tr>
</table></td><td></td></tr>
<tr><td>D5</td><td></td><td>Auto On</td><td>Last Status</td></tr>
<tr><td>D4
D3
D2</td><td colspan="2">SYSTEM</td><td>TABLE 1</td></tr>
<tr><td>D1</td><td>WITH CHILD LOCK</td><td>WITHOUT CHILD LOCK</td><td>FOR MIDDLE EAST</td></tr>
<tr><td>D0</td><td>NO TTX (ATS = ON)</td><td>TTX (ATS=OFF)</td><td></td></tr>
<tr><td rowspan="6">B
Y
T
E
1</td><td>D7</td><td>WITHOUT PIP</td><td>WITH PIP</td><td></td></tr>
<tr><td>D6</td><td>NOISE REDUCTION OFF(ALWAYS)→OSD
NO DISPLAY (TDA8842)</td><td>NOISE REDUCTION ON/OFF
FUNCTION MENU DISPLAY (TDA8844)</td><td></td></tr>
<tr><td>D5</td><td>SCART : CH UP/DOWN FUNCTIONED</td><td>RCA : NOT CH UP/DOWN FUNCTIONED</td><td></td></tr>
<tr><td>D4
D3
D2</td><td colspan="2"><table>
<tr><th>D4</th><th>D3</th><th>D2</th><th>TV</th><th>AV</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>PLUS→NORMAL</td><td>PLUS→NORMAL</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>PLUS→NORMAL→ZOOM→16:9</td><td>PLUS→NORMAL→ZOOM</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>NORMAL→ZOOM→16:9</td><td>NORMAL→ZOOM→16:9</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>NORMAL→ZOOM→16:9</td><td>NORMAL→ZOOM</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>NORMAL→ZOOM</td><td>NORMAL→ZOOM</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>PLUS→NORMAL→ZOOM</td><td>PLUS→NORMAL→ZOOM</td></tr>
</table></td><td>■ NORMAL MODE E/W
DATA=PLUS + 9
■ PLUS MODE PHS DATA=
PLUS - 1 (PAL/NT)</td></tr>
<tr><td>D1
D0</td><td colspan="2"><table>
<tr><th>D1</th><th>D0</th><th>SYSTEM</th><th>REMARK</th></tr>
<tr><td>0</td><td>0</td><td>B/G</td><td rowspan="4">"MEMORY" BY
PROGRAM
CHANNELS
REQUIRED</td></tr>
<tr><td>0</td><td>1</td><td>D/K</td></tr>
<tr><td>1</td><td>0</td><td>I</td></tr>
<tr><td>1</td><td>1</td><td>B/G & D/K & M</td></tr>
</table></td><td>1) SOUND SYSTEM DURING THE AUTO SEARCH
2) SOUND SYSTEM DURING THE FACTORY MODE RESET
3) MANUAL SEARCH (SYSTEM DOES NOT MATTER)</td></tr>
<tr><td>OTHER</td><td colspan="3">1) HIGH FOR XA/XB (ALWAYS) : CRYSTAL 3.58MHz/4.43MHz CONSTANT
2) AUDIO MUTE DURING NO SIGNAL (ALWAYS) 3) SET THE CONTRAST TO 90 IN THE STANDARD PICTURE</td></tr>
</table>

4-2-4 MICOM Option Byte Table

<table>
<tr><th>BYTE</th><th>BIT</th><th colspan="2">LOW</th><th colspan="2">HIGH</th><th>REMARK</th></tr>
<tr><td rowspan="9">B
Y
T
E
0</td><td rowspan="2">D7</td><td colspan="3" rowspan="2"><table>
<tr><th>D7</th><th>D6</th><th>SYSTEM</th><th>IC</th><th>A/V</th></tr>
<tr><td>0</td><td>0</td><td>STEREO + NICAM</td><td>TDA9859 /TDA9874</td><td rowspan="3">SCART
+ FRONT RCA</td></tr>
<tr><td>0</td><td>1</td><td>STEREO</td><td>TDA9859 / TDA9840</td></tr>
<tr><td rowspan="2">D6</td><td>1</td><td>0</td><td>LINE STEREO</td><td>TDA9859</td><td rowspan="2"></td></tr>
<tr><td>1</td><td>1</td><td>MONO</td><td>TDA8844</td><td>1 SCART/RCA</td></tr>
</table></td><td></td></tr>
<tr><td>D5</td><td colspan="2">WITHOUT TDA9178</td><td colspan="2">WITH TDA9178</td><td>FOR EUROPE CIS</td></tr>
<tr><td>D4</td><td colspan="2">-</td><td colspan="2">NICAM ERROR CHECK BIT</td><td></td></tr>
<tr><td>D3</td><td colspan="2">AFT-ON</td><td colspan="2">AFT - OFF</td><td>INDIA ONLY</td></tr>
<tr><td>D2</td><td colspan="2">TDA8375</td><td colspan="2">TDA8844</td><td></td></tr>
<tr><td>D1</td><td colspan="2">RF AUDIO OUT MUTE OFF</td><td colspan="2">RF AUDIO OUT MUTE ON</td><td></td></tr>
<tr><td>D0</td><td colspan="2">D/K STEREO F = 6.752</td><td colspan="2">D/K STEREO F = 6.25'</td><td></td></tr>
<tr><td>D0</td><td colspan="2">CLOCK DISPLAY OFF</td><td colspan="2">CLOCK DISPLAY ON</td><td>SZM-199EV ONLY</td></tr>
</table>

4-2-5 TABLE 1 (SYSTEM)

BYTE 0			SYSTEM	SOUND SYSTEM		SOUND SYSTEM			
D4	D3	D2		OSD	SYSTEM	RF MODE		AV1/ AV2 MODE	
						OSD	SYSTEM	OSD	SYSTEM
1	1	1	CI	X	I	X	PAL	X	AUTO
1	1	0	CII	X	I	X	PAL	X	AUTO
1	0	1	CW	B/G→I→D/K→		AUTO→PAL→SECAM→NT4.43→		AUTO→PAL→SECAM→NT4.43→NT3.58	
1	0	0	CF	X	B/G, L/L'	X	PAL/SECAM	X	AUTO
0	1	1	CK/CX	B/G→D/K		AUTO→PAL→SECAM→NT4.43→		AUTO→PAL→SECAM→NT4.43→	
0	1	0	CB	X	B/G	X	PAL	X	AUTO
0	0	1	CS 1	B/G→I→D/K→M		AUTO→PAL→NT4.43→NT3.58→		AUTO→PAL→NT4.43→NT3.58→	
0	0	0	CS 2	B/G→I→D/K→M		AUTO→PAL→SECAM→NT4.43→NT3.58		AUTO→PAL→SECAM→NT4.43→NT3.58	

4-2-6 RESET

The Reset Mode is used during factory inspection.
Function Reset:

1. Channels — Add/Erase
2. Sort — Non
3. Language — Basic (English)
4. System — Auto (Non-TTX micom only)

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B^+ power supply must be set to +130/155 volts. (Full color bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. The high voltage should not exceed 30KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 30KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Screen Adjustment

1. Connect CRT socket pin RK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the P mode key (on the remote control) for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage (See Fig.4-1.) on the oscilloscope becomes 130 ± 2.5V.

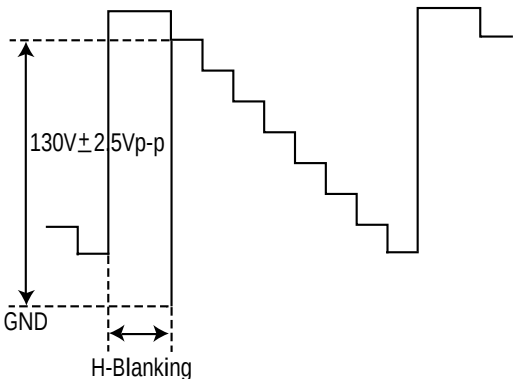


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-1.
4. Input a black and white signal.
5. Fully demagnetize the receive by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-2).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

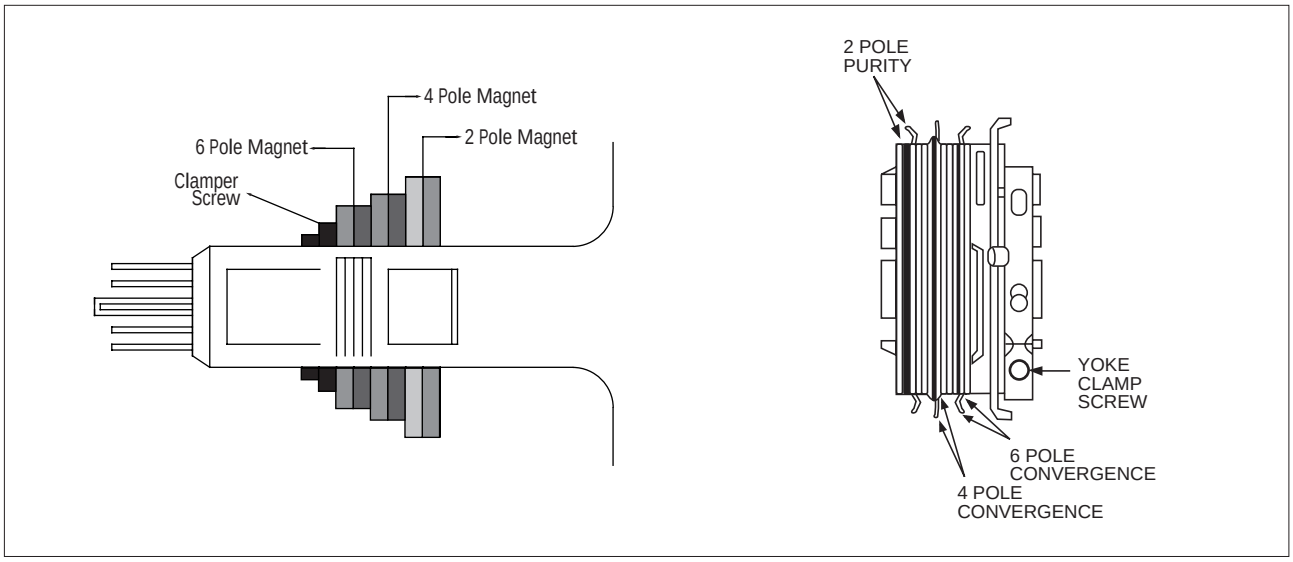


Fig. 4-2 Convergence Magnet Assembly

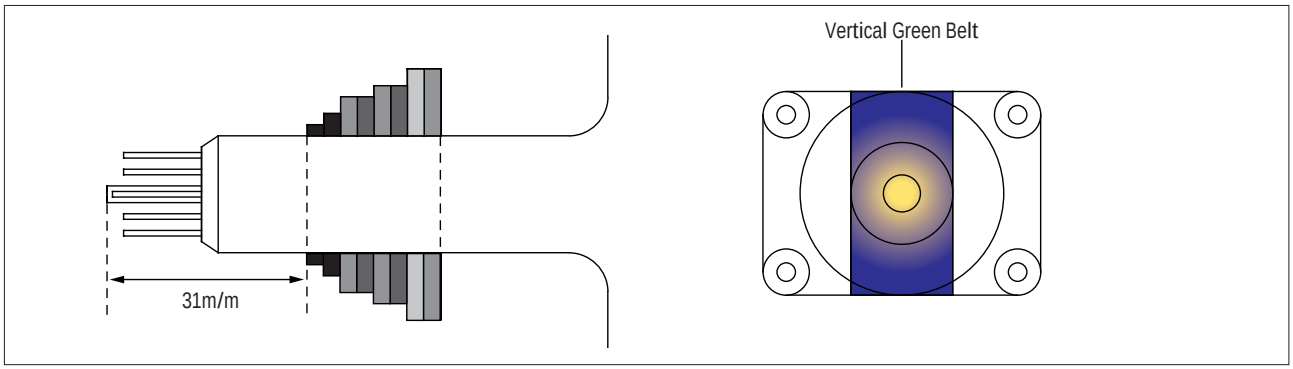


Fig. 4-3 Center Convergence Adjustment

4-3-7 White Balance Adjustment

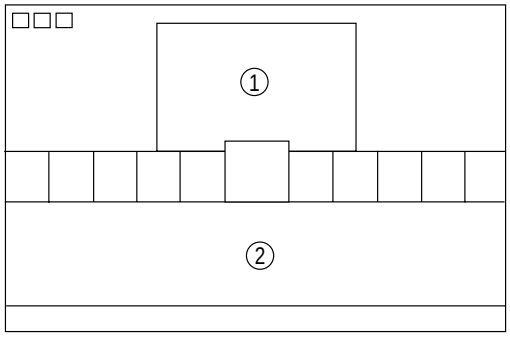


Fig. 4-4

(a) Set up

1. Warm up the TV for at least 30 minutes in the Aging Mode(Test Pattern). This mode is displayed by entering the following sequence:

   DISPLAY→FACTORY (Select Test Pattern)

2. Input a Toshiba pattern.

(b) High-Light Adjustment

1. Set SCT to 50 fL in the Factory Service Mode using CA100. (See Fig. 4-4 ❶)

(c) Low-Light Adjustment

1. Set SBT to 1.2 fL in the Factory Service Mode using CA100. (See Fig. 4-4 ❷)

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the Brightness and Contrast controls for a well defined picture.
3. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
4. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.
5. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)
6. Repeat adjustments 2~6, if necessary.
7. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-3).

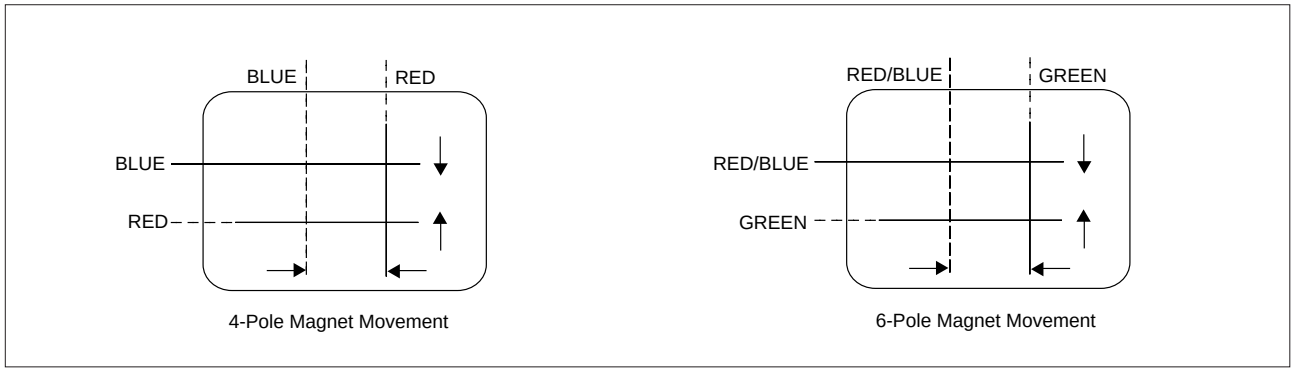


Fig . 4-5 Center Convergence Adjustment

4-3-9 VCO Adjustment

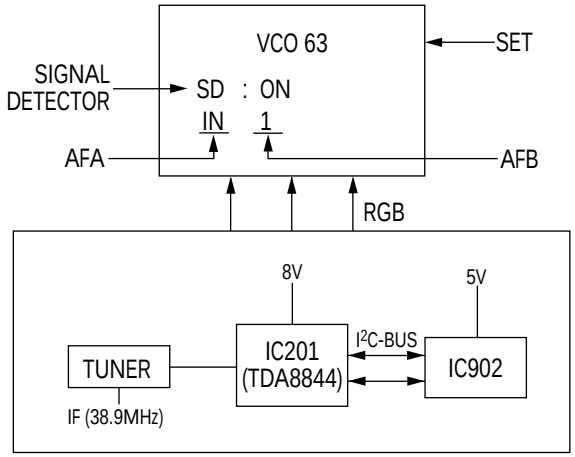


Fig. 4-6

1. Turn on the TV.
2. Set IF port of a tuner to 38.9MHz. (Use a pattern generator).
3. Input a color bar pattern(PAL-B/G system).
4. In the Factory Service Mode, select "Adjustment → VCO" and set VCO data to 63.
5. Ensure "SD On" (Signal Input) and "SD Off" (No Signal).
6. Adjust T201 (connected to TDA8844 pins3,4) so that AFA Bit is "INSIDE WINDOW" (the AFB Bit is 1).

4-3-10 RF AGC Adjustment

1. Connect a pattern generator (PM5418) RF signal to tuner RF.

2. Select a gray scale pattern and PAL-B/G system.
   Set to 479.25MHz.

3. Connect IC201 (ONECHIP) pin 53 to a digital multimeter.

4. Adjust AGC (using volume keys) in the Factory Service Mode.
   Set IC201 (ONECHIP) pin 54 to 3.7 $\pm$ 0.05v(DC).

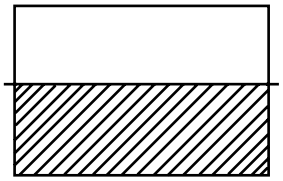
5. Adjust AGC within 20 seconds after power ON.

4-3-11 Geometry Adjustment (SC -> PVS -> PVA ->PSL -> PHS)

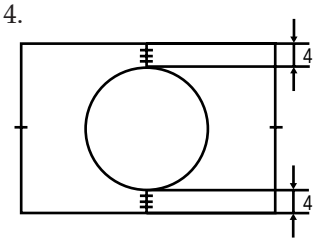
1. Input a Lion Head pattern.

2. SET the SC Data steps 10~12 in the Factory Mode.

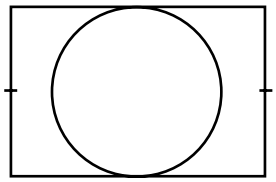
3. Adjust with PVS (starts blinking) exactly at middle of the screen.



4. Adjustment with PVA : Top and Bottom margins of the picture are 4.



5. Adjustment with PSL : Bottom of picture to bottom of screen.



6. Adjust PHS horizontally. Center the picture.

MEMO